DOCUMENT RESUME

ED 177 317 CE 022 753

AUTHOR	Wheeler, Jeanette D.; And Others
TITLE	Case Studies and Promising Approaches. Vocational Education Equity Study. Final Report: Volume III.
INSTITUTION	American Institutes for Research in the Behavioral Sciences, Palo Alto, Calif.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
REPORT NO	AIR-66601-3/79-FR(3)
PUB DATE	Mar 79
CONTRACT	300-77-0318
NOTE	240p.; Some of the tables in this document may not reproduce well due to light print; For related documents see CE 022 751-755
EDRS PRICE	MF01/PC10 Plus Postage.
DESCRIPTORS	Activities; Information Sources; Program Costs; Program Development; *Program Effectiveness; Program Evaluation; *Sex Discrimination; Sex Fairness; *Sex Stereotypes; *Vocational Education

ABSTRACT

Information on programs and activities which have been developed to reduce sex inequities in vocational education is provided. The document is organized into two sections: section 1 contains case studies of twelve programs selected from a nationwide search, and section 2 contains brief descriptions of twelve promising approaches to reducing sex inequity, also selected from the nationwide search. Each of the case studies includes the following components: program overview; background and development; program description, target population, staff, facilities, and activities (recruiting, instruction, support services, job development and placement, community involvement, and support); costs and funding sources; program effectiveness; program future; replicating the program; and contact person and program address. Each of the approach descriptions includes the following components: target population, purpose, idea for replication, activities, evaluation and dissemination, funding source, and contact person and address. (JH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

AIR-66601-3/79-FR(III)

ED177317

Final Report
Volume III

CASE STUDIES AND PROMISING APPROACHES
VOCATIONAL EDUCATION EQUITY STUDY

Prepared by:

American Institutes for Research

Authors:

Jeanette D. Wheeler
Jay A. Egan
Richard A. Bond
Deborah L. Plumley
Laurie R. Harrison
Beverly J. Parks

Edited by:

Charles W. Dayton

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

March 1979

CE 022 753

Performed under U.S. Office of Education Contract No. 300-77-0318. Points of view or opinions stated do not necessarily represent USOE position or policy.

ISBN 0-89785-653-8

TABLE OF CONTENTS

INTRODUCTION 1

Program Selection 1

Format Descriptions 5

Thoughts on Replication 5

PART I: CASE STUDIES: VOCATIONAL PROGRAMS THAT ARE PROMOTING SEX EQUITY

Advocates for Women, Hayward, California A-1

New View, Mountain View, California B-1

Area Vocational Program, Adams County, Colorado C-1

WENDI, Brevard County, Florida D-1

Project MOVE, Ithaca, New York E-1

Eli Whitney Vocational High School, Brooklyn, New York F-1

New Pioneers, Raleigh, North Carolina G-1

Work Options for Women, Raleigh, North Carolina H-1

Industrial Orientation, Eugene, Oregon I-1

FACET/FACIT, Charleston, South Carolina J-1

Non-traditional Job Opportunities, Longview, Washington K-1

Women's Development Center, Pewaukee, Wisconsin L-1

PART II: PROMISING APPROACHES

Counselor Resource Center, Eutaw, Alabama II-1

Career Development for Women Offenders, Miami, Florida II-3

EGO (Equal Goals in Occupations), Honolulu, Hawaii II-5

Second Start, Elgin, Illinois II-7

Center for Displaced Homemakers, New Orleans, Louisiana II-9

Project BEACON, Waterville, Maine II-11

New Directions for Women, Baltimore, Maryland II-13

SCEE (Student Commitment to Educational Equity), Boston, Massachusetts II-15

WITS (Work in Technology and Science), Cambridge, Massachusetts . . II-17

Project OPTIONS, Hanover, New Hampshire II-19

WITT (Women in the Technologies), Edison, New Jersey II-21

Project EXCEL, Las Cruces, New Mexico II-23

PREFACE

From the beginning of our search for case study sites to the final revisions for this volume, we have been pleased and fortunate to have the enthusiastic cooperation of our contacts in the field. A theme throughout has been the interest expressed by vocational educators in the issue of sex equity and how to achieve it. We hope this volume will provide encouragement and examples that will be helpful for others interested in furthering sex equity.

We especially want to acknowledge the invaluable assistance of everyone associated with the programs we visited. This applies in particular to the Program Directors, who graciously gave their time and help to answer our questions, schedule the interviews, and review our drafts. We appreciate their patience and cooperation.

Laurie R. Harrison, Project Director
Beverly J. Parks, Assistant Project Director
Jeanette D. Wheeler, Case Study Coordinator
Richard A. Bond, Project Associate
Jay A. Egan, Project Associate
Deborah L. Plumley, Project Associate

DO NOT FILM THIS PAGE

CASE STUDIES AND PROMISING APPROACHES
VOCATIONAL EDUCATION EQUITY STUDY

INTRODUCTION

This document provides information on programs and activities which have been developed to reduce sex inequities in vocational education. It contains case studies of 12 programs, and briefly describes 12 promising approaches. The evaluation data on the case study programs suggest that they are fostering greater sex equity. Many features of these programs appear to be worth replicating, and the purpose of describing them is to provide enough information so that others can visualize how the programs might be applied elsewhere. Each promising approach provides information on procedures which appear to merit further attention. They generally are not as fully documented or evaluated as the case study programs, but they contain interesting features which offer ideas others might find useful.

This document is Volume III of a four-volume set. Volume I describes the methods and results of the congressionally mandated study of the nature and extent of sex discrimination and stereotyping in vocational education, and efforts which are being made to eliminate inequities. Volume II provides a review of the literature on sex role socialization and sex equity legislation, and surveys past research and accumulated information on 18 issues important to sex equity in vocational education. Volume IV is a Replication Handbook which describes procedures and provides instruments which educators can use to assess sex equity in their own settings.

Program Selection

A nationwide search was conducted in order to identify vocational programs that are reducing sex inequities. The search employed two basic techniques. First, we contacted experts in the field, including our advisory panelists, and surveyed the relevant literature. Second, as part of the data collection phase of the study, we visited 50 state agencies and a sample of 100 vocational schools across the nation. We asked many of those we interviewed if they were aware of any vocational programs with a nontraditional focus. Our assumption was that

many programs might exist at the grass-roots level, and not yet appear in the literature.

We received a total of 250 nominations which identified 100 promising programs. Thirty-six of these programs passed the following initial screening criteria:

- The program is currently in operation.
- The program is targeted for secondary or postsecondary populations.
- Information is available that documents the program outcomes.
- The program focuses on reducing sex inequities.
- The program is suitable for replication elsewhere.

The final selection procedures involved an inhouse and advisory group review of the available program documentation. This review led to the selection of 25 programs. These 25 programs covered a broad spectrum of program types. Settings included high schools, community colleges, and graduate programs, in rural, suburban, and urban communities. Strategies included efforts to change awareness and attitudes, to provide nontraditional training and placement for students, and to provide inservice courses for teachers and counselors. Some programs involved a single school and some were statewide. Tables 1 and 2 illustrate the wide variety and special features in the programs selected. Twelve were chosen to be case studies, mainly because of the presence of more complete data and documentation.* Table 1 summarizes the major characteristics of each of the case studies. The decision was made to include descriptions of the remaining 12 programs as promising approaches, and an overview of those programs is provided in Table 2.

---

*A thirteenth program, Better Jobs for Women in Denver, Colorado was selected to be a case study. Unfortunately, due to time pressures and prior commitments at the site, it was not possible to arrange a time for a site visit. This program does have considerable evidence that it is expanding nontraditional career opportunities for women, and is worthy of attention by potential replicators. The program has been documented in another source, which interested readers can obtain from the U.S. Government Printing Office. The citation:

> Women in Nontraditional Jobs: A Program Model. Denver: Better Jobs for Women. U.S. Department of Labor: Women's Bureau, 1978. Superintendent of Documents, U.S. Government Printing Office. Stock #029-002-00030-9.

Table 1

OVERVIEW OF CASE STUDIES

PROGRAM TITLE AND LOCATION	REGION SERVED BY PROGRAM				TARGET POPULATION				TYPE OF ACTIVITY						SPECIAL FEATURES	FUNDING SOURCE
	Urban	Suburban	Rural	Statewide	Secondary	Postsecondary (Adult)	Female	Female & Male	Special Population	Awareness	Job Readiness Training	Exploratory Skills Training	Vocational Skills Training	Job Placement	Staff Development	
ADVOCATES FOR WOMEN Hayward, CA		*				*	*		Low income		*		*	*		Nontraditional training using existing area facilities; stipends for participants	CETA/Private Foundation
NEW VIEW Mountain View, CA		*				*	*						*			College credit classes; paid internships in technical fields	Industry/private foundation/college district
AREA VOCATIONAL PROGRAM Adams County, CO		*				*		*	Low income, 25% Hispanic		*		*	*		GED and ESL instruction; uses facilities of 4 school districts; job development; focus on nontraditional training for women	State Board occupational education/ CETA
WINDI Cocoa, FL		*				*	*		Low income	*	*			*		Career planning; prepares women for re-entry or entry into job market	District college/CETA district
PROJECT MOVE Ithaca, NY				*	*			*	Secondary staff	*					*	Inservice training for teams of secondary staff; graduate credits for 2 semester courses	State vocational education funds
ELI whITNEY VOCATIONAL HIGH School Brooklyn, NY	*				*			*	80% Minority			*				Hands-on experiences in all vocational areas for all freshmen students	No special funding
NEW PIONEERS Raleigh, NC				*	*			*	Secondary staff	*					*	Statewide training of vocational administrators, instructors, counselors in sex equity	State vocational education funds
HOPE OPTIONS FOR WOMEN Raleigh, NC			*			*	*		Low income				*	*		Nontraditional skills training at 5 community colleges; stipends paid; 6 months on-the-job training	CETA
INDUSTRIAL ORIENTATION Eugene, OR	*	*				*		*	Prevocational	*		*				Hands-on experiences in 8 nontraditional vocational areas; career planning and counseling	State vocational education funds
FACT/FACIT Charleston, SC	*				*	*	*			*	*	*	*	*		Recruits high school students for special summer program; technical training for participants	Vocational education/ U.S. Office of Career Education funds
NONTRADITIONAL JOB OPPORTUNITIES Longview, WA			*			*	*		Low income		*		*	*		Skill training with cooperative links to area industries; high placement rate	CETA/College district
WOMEN'S DEVELOPMENT CENTER Pewaukee, WI		*				*		*	Older women (displaced and re-entry)	*	*					Resource center; individual and group counseling; career planning workshops	State vocational education funds

Table 2

OVERVIEW OF PROMISING APPROACHES

PROGRAM TITLE AND LOCATION	REGION SERVED BY PROGRAM: Urban	Suburban	Rural	Statewide	TARGET POPULATION: Secondary	Postsecondary (Adult)	Female	Female & Male	Special Population	TYPE OF ACTIVITY: Awareness	Job Readiness Training	Exploratory Skills Training	Vocational Skills Training	Job Placement	Staff Development	SPECIAL FEATURES	FUNDING SOURCE
CURRICULUM & MATERIALS RESOURCE CENTER Eutaw, AL			*		*		*		Predominantly minority	*					*	Sex-fair vocational information and materials; inservice training for school counselors	WEEA
CAREER DEVELOPMENT FOR WOMEN OFFENDERS Miami, FL	*					*	*		Offenders and ex-offenders		*		*	*		Economically disadvantaged minority women; counseling and skills training prior to and after release	WEEA/CETA/ college district
EGO (Equal Goals in Occupations) Honolulu, HA				*	*	*		*	Instructors, counselors, and administrators	*					*	Secondary and community college workshops and action plans; sourcebook of activities	Vocational education funds
SECOND START Elgin, IL	*					*	*		Unemployed and underemployed women	*	*	*				Hands-on experiences in nontraditional skills; concepts incorporated in re-entry program	Vocational education funds (Part C)
CENTER FOR DISPLACED HOMEMAKERS New Orleans, LA	*					*	*		Displaced Homemakers	*	*			*		Career planning and counseling; nontraditional job placement through affiliated agency	State vocational education funds
PROJECT BEACON Waterville, ME			*	*	*			*	Teachers, Counselors, administrators	*					*	Program expanded in state to develop teams as organizational change agents for sex equity	State vocational education funds
NEW DIRECTIONS FOR WOMEN Baltimore, MD	*					*	*		Displaced Homemakers	*					*	Developing and disseminating resources and training in sex equity; target expanded to counselors, teachers, and nontraditional students	State vocational education funds
STUDENT COMMITMENT TO EDUCATIONAL EQUITY (SCEE) Boston, MA				*	*			*	Male and female student teams	*						Involves student teams in changing inequities; identifying problems, and implementing action plans in own schools	WEEA
WITS (Work in Technology and Science) Cambridge, MA	*				*			*	Secondary teachers and counselors	*					*	Encourages female participation in technical fields through faculty workshops and summer internships in industry	State department of education/private foundations
PROJECT OPTIONS Hanover, NH			*		*		*		Non-college bound rural secondary females	*						Developing, testing, and adapting career development curricula	WEEA
WITT (Women in the Technologies) Edison, NJ	*				*	*		*		*		*				Exploratory courses in nontraditional technological fields; workshops for employers to learn unbiased management	WEEA/State vocational education funds
PROJECT EXCEL Los Cruces, NM			*		*			*	50% Hispanic	*	*	*				Experience-based career education model; exploratory placements with community employers	Federal vocational education demonstration project funds

Site visits were made to each of the case study programs. Using outlines of major topics to be addressed in the case study description as guidelines, the site visitors talked to Program Directors and staff members, school administrators, instructors, counselors, students, union officials, and employers. Each case study and promising approach description has been reviewed by personnel at the site to insure that the information presented is accurate.

Format Descriptions

It is always a difficult task, when developing case studies, to steer a middle course between providing too little essential information and too much trivial detail. The length decided on for these case studies was approximately 15 pages, with the hope this would be a readable amount and also enough to present the important features of the programs selected. The promising approaches have been limited to one or two single-spaced pages. The sections included in each of these are outlined below.

Case Studies

- Program Overview
- Background and Development
- Program Description
  - Target Population
  - Staff
  - Facilities
  - Activities (Recruiting, Instruction, Support Services, Job Development and Placement, Community Involvement and Support)
- Costs and Funding Sources
- Program Effectiveness
- Program Future
- Replicating the Program
- Contact Person and Address of Program

Promising Approaches

- Target Population
- Purpose
- Idea for Replication
- Activities
- Evaluation and Dissemination
- Funding Source
- Contact Person and Address

Thoughts On Replication

The case studies attempt to show how each program developed and how the developers solved particular problems. These programs have worked in their

own communities and settings, and others can benefit from their experiences and obtain ideas for their own use. Inevitably, some features will have to be adapted when brought to a new environment. In order to replicate a program, careful analysis of the original program and the new setting must be made. There are, however, some general suggestions or guidelines which emerge from the experiences of the described programs. A summary of the features which can help pave the way to successful replication follows.

1. Consider Employers and the Job Market

   Clearly any job training program has to be related to existing employment opportunities in the labor force. This statement is nothing new to vocational educators, but its verity cannot be overemphasized. Since the employers hold the ultimate key to the success of any training, it is best to include them in the process from the beginning. It is important to remember that federal affirmative action regulations affect many employers, encouraging them to hire more women and minorities. Therefore there are potential, if not always enthusiastic, employers of nontraditional workers. Early liaison efforts with such employers will foster a more receptive employment environment. Several programs developed printed materials or filmstrips to be used in orienting employers to the program, or apprising them of programs. Potential employers were asked to comment on the training provided, and encouraged to offer on-the-job practical experience. These efforts resulted in more placements and more employer support for the program.

2. Provide a Thorough Orientation to the Program. Programs generally found that it was absolutely essential for program participants to have a clear idea of what the program entailed. Participants need to understand how much time and effort it will take. If it is a job training program, it is best that they have a clear understanding of what the basic working environment and job tasks are like. They should have a realistic picture of what the salary they can expect will be, what the unpleasant aspects of the work are, and so on. Such an orientation allows the program to work with those participants who are truly motivated and serious about the training they are to receive. A goal of these programs is not to "coerce" or "push" individuals into nontraditional careers, but rather to provide realistic expectations to those who are so motivated.

Several programs which worked with secondary level students found it was useful to provide an orientation to the students' parents. The program developers feel it was important for the parents to understand the program so that they could provide support at home.

For exploratory programs the problem of orientation is less serious since these programs are designed to provide an orientation to various occupational fields. Two important features of exploratory programs were cited by case study program developers. The first is that the program should provide substantial hands-on experience, and the amount of time devoted to lecturing should be minimized. Students must also obtain an understanding of job possibilities, likely wages, working conditions, and so on for each occupational field explored. The second point is that while the experience should be realistic enough to allow students to judge how well they like an occupational field, this should take place in a supportive atmosphere.

3. Obtain Full Support from and Integration with the Host Agency

This recommendation applies particularly to programs hosted in community colleges. Project Directors of programs situated in community colleges felt it was essential to be completely integrated into the structure of the college rather than being perceived as an "add-on" feature. This gave the program more visibility and clout in the community at large and with potential participants in particular. A related point is that all the staff at a host agency must be fully aware of the program so that they too can lend support and cooperation.

4. Provide Necessary Support Services to Participants

Many programs felt that a key ingredient of their success came from offering supportive counseling services to clients. Many individuals who are enrolled in nontraditional training programs need additional encouragement and support to strike out on a relatively untraveled path. Programs which provide training for older women often find these women encounter family problems and other pressures associated with returning to school or entering the labor force. Some programs have found it helpful to offer child care and transportation services.

All programs emphasized the value of making use of existing services rather than duplicating efforts.

Another way of providing support to adult participants is to be as flexible as possible with respect to training times and locations. Adults who have families or work responsibilities need to be able to continue to meet these responsibilites while enrolled in the program. Programs should be sensitive to these needs in offering services.

5. Carefully Plan and Evaluate the Program

A successful program must have a clear idea of what it hopes to achieve and a way of measuring whether or not it is achieving it. Evaluation results provide the necessary feedback for making improvements. One case study program follows a very structured management-by-objective system which provides them with clear, specific goals to be evaluated quarterly. This allows them to make necessary adjustments to improve the program. Several programs felt the most useful evaluation data came from follow-ups of participants who had left the program. Potential replicators are encouraged to follow up program participants in an effort to learn of the ultimate success of their programs, and allow for change and improvement.

6. Hire Competent, Dedicated Staff

It is a platitude to say that the staff can make or break a program, but is is nontheless true. The qualities of staff which appear to be most important for successful equity programs include the following:

- A genuine commitment to sex equity. In addition to a concern for women's issues, this implies an understanding that the purpose of equity efforts is to expand vocational choices for males and females.
- A knowledge of the labor force, particularly in the local area, and a familiarity with the community in general and its available resources.
- An ability to serve as a role model for participants. Staff members must understand that lack of experience or knowledge can be corrected through learning. They must be willing and able to provide support to program participants.

Many of the programs described in this volume developed because there was a realization that simply stating that all occupational training areas are open to both sexes is not enough. More exposure and support are needed for things to be truly equal. We hope the case studies and promising approach descriptions which follow will enable others to contribute to the promotion of sex equity in vocational education.

PART I

CASE STUDIES

DO NOT FILM THIS PAGE

ADVOCATES FOR WOMEN

Hayward, California

"The training of women ain't no different than the training of men. I chose welding because it's a classy job--really skilled work. Advocates didn't push me but they encouraged me and helped make it possible."

A Trainee

PROGRAM OVERVIEW

The 40-year old woman is single and the head of a household that, on and off for the last few years, had been dependent on welfare payments. She is typical of the women served by Advocates For Women (AFW) in Hayward, California. A majority are high school dropouts and have few marketable skills and little work experience. Their problems are difficult to solve and their needs are many. To meet those needs the AFW Hayward Women and Work Resource Center has provided services that include:

- Skills Training in Nontraditional Fields
- Individual and Group Counseling
- Workshops in Job Search and Interview Techniques
- Tutoring in Math and Language Skills
- A Skills Bank and Job Bank
- A Resource Library
- Referrals to Child Care and Legal Aid Services
- Stipends during the Training Period

By offering a variety of vital services, centered around the employment training and placement of women in nontraditional fields, AFW has been able to assist women to take the first steps toward long-term, well-paying employment in fields traditionally dominated by men.

Program funding and resources are obtained from a variety of sources. Funds from CETA provide the bulk of the money, with smaller amounts coming from a private foundation and corporate contributions. The training programs are held in area community colleges and skills centers, through the Hayward adult education program, and via union apprenticeship courses.

Several indicators suggest the program is having success. Enrollments in 1977-78 were slightly above the goal. Many of the participants found employment as desired. Employers, instructors, and the involved women themselves offer many positive reactions to the program.

PROGRAM BACKGROUND AND DEVELOPMENT

The idea of a nontraditional training program began with the San Francisco-based parent organization, Advocates for Women. Originally conceived in 1972 as an advocacy group, AFW has expanded its scope and locations to serve as an economic development agency for women. Each of the three AFW facilities is different in focus, with the Hayward office specializing in nontraditional training. In the past year nearly 2,500 women have used the services provided by the three offices.

Hayward's first program started with the award of Department of Labor/ CETA funds for the 1976 fiscal year. Initially, the agency functioned as a resource and referral center, providing women with contacts for job placements. Direct placement services, however, were found to be only a partial solution to the problems of the women who applied for help. Although the applicants during the first year of the project ranged from those with college backgrounds to those with no training at all, they shared similar barriers to long-term, well-paying employment. Prospective employers wanted women with at least entry-level training in specific skill areas. Finding jobs in nontraditional fields for many of the AFW applicants was difficult.

One woman in the pre-apprenticeship training program offered by the Carpenters' Union said, "I couldn't have done it without AFW. We were

accepted by the union because of AFW." The barriers encounterd by both the individual women and by the early AFW organization, therefore, included not only employers who wanted to hire trained applicants, but unions that had made little, if any, effort to encourage women.

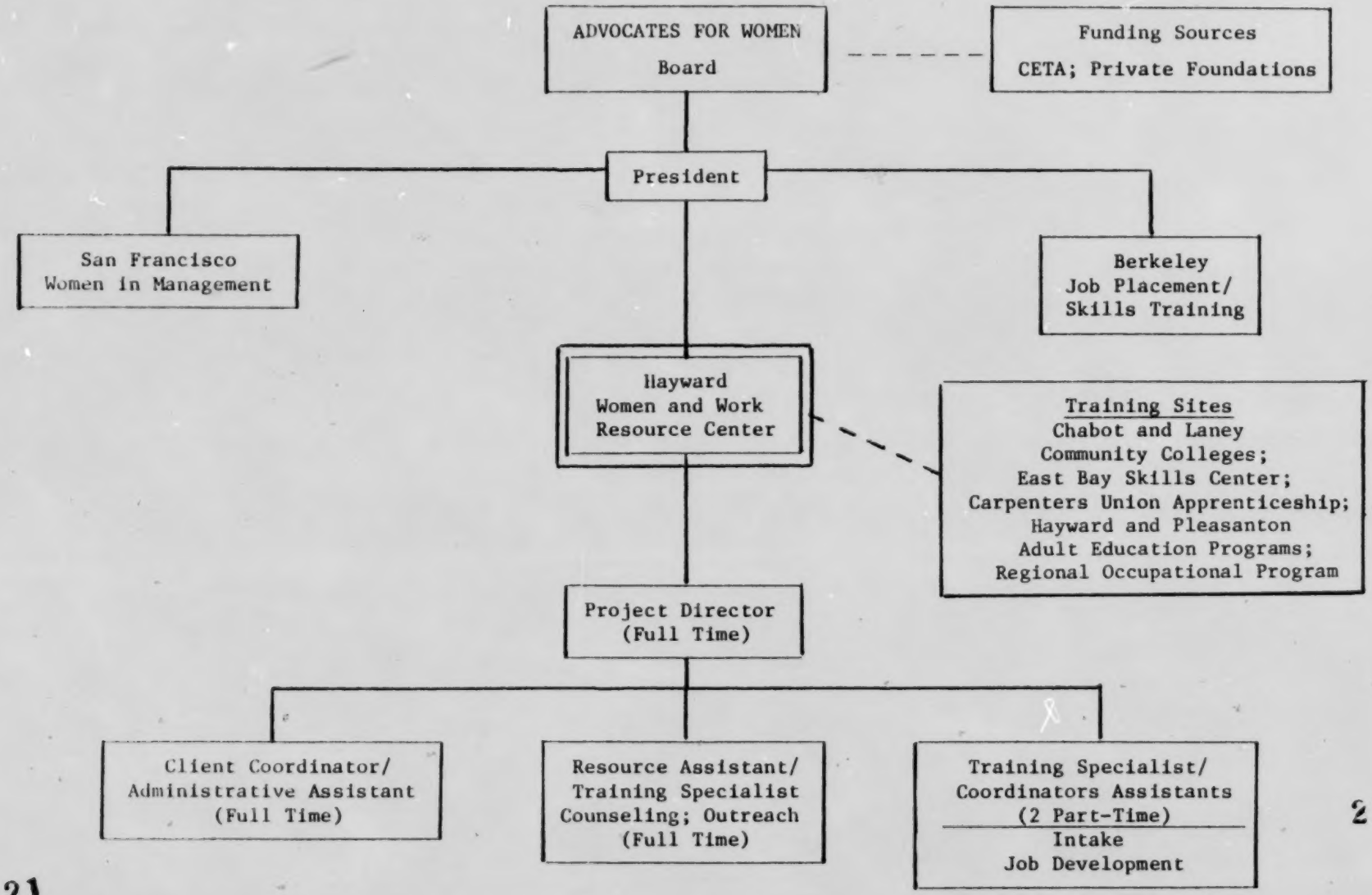
Perhaps the hurdle most difficult to overcome, however, has been the attitudes of women themselves toward nontraditional vocations. A participant presently enrolled in a machine tool course described how that particular barrier is approached by AFW: ". . . any woman who wants to go into what was considered a man's field has to be determined and motivated. She shouldn't choose it as a second choice or if she's doubtful. AFW screens women very carefully, and encourages them once they've made their own decision."

Simply stated, the major purpose of the AFW/Hayward program is to place women in nontraditional jobs so that they can support themselves and their families. In order to participate as trainees in AFW, women must be CETA-eligible under guidelines established by the prime sponsor, the Alameda County Training and Employment Board (ACTEB). These guidelines stress low income and lack of adequate employment. Thus women who qualify are allowed to receive stipends during their training period. Although the ultimate goal with CETA is nonsubsidized job placement, AFW's overall goal is to place women in nontraditional jobs that are not temporary training slots, but have strong prospects for continued employment with upward career mobility. And while the program is focused on low income, unemployed women, many women ineligible for CETA support use the services of the AFW Women and Work Resource Center to learn about educational programs or job possibilities in their communities.

With the support of the central AFW organization in San Francisco as the fiscal agent, the Hayward staff is able to focus on the tasks of recruiting, counseling, training, placing, and following up participants. The time-consuming search for funding and the resulting paperwork, for the most part, are tasks assumed by the central office. Figure 1 shows the organizational structure and staffing of AFW and its Hayward center.

Figure 1

ADVOCATES FOR WOMEN - HAYWARD



The Project Director and those working under her handle the recruiting, intake work, counseling, job development, and placement, while most of the actual training takes place at local community colleges, the East Bay Skills Center, two adult education programs, the Regional Community Occupational Program, and via the carpenter's union apprenticeship program. Yearly on-site evaluations of the Center are conducted by a prime sponsor evaluation committee that looks at the results of the previous year's activities and also examines the current year's modifications. The program strives to be flexible by adapting to changing employment needs. The president of AFW described the planning, development, and evaluation stages as "a learning experience where we look at the program to find out where to change and what to change."

At times flexibility has been forced on AFW. For example, when the passage of the Proposition 13 tax limitation initiative closed off the use of the Hayward district's adult education facilities, new training sites had to be found. AFW was able to pay for participants to learn their nontraditional skills at the East Bay Skills Center.

At the present time, new arrangements have been made to use the adult education classes in two school districts, with student fees paid by AFW. Several women are also enrolled in Regional Occupational Center programs which are made available to adults on a space available basis. In sum, finding alternatives to training programs that are no longer available has allowed AFW to continue and to expand.

PROGRAM DESCRIPTION

Target Population

In AFW's contract with ACTEB, the target population and the percent of women required to have positive terminations are rigidly defined. Barbara is typical of the target population. She heard about Advocates from the CETA-on-Wheels van operated to spread job information to Alameda County residents. During her initial interview at the Hayward center, she talked

about her lack of a high school diploma and work experience, and the difficulties she faced raising her young school-age child and the baby on her lap, on welfare money.

Over 40% of the women served by AFW in 1977-78 were high school dropouts, 55% were welfare recipients, about 80% were single heads of households, and almost 90% had dependent children. Their prior work experiences had been in the traditionally low-pay, low-skill "women's" jobs such as waitressing and domestic work. Not all the women are as young as those in Barbara's age group; the ages span a range from 18 to 62. Often the slightly higher income levels of women designated as displaced homemakers or reentry women restrict AFW from offering their full services to them, but they have obtained help from the referral and resource components of the Center.

Contractual specifications also obligate AFW to serve "significant segments" of the population. AFW's target population has included 7% blacks, 18% Hispanics, 70% under 29 years of age, and 14% ex-offenders. Two percent of the women served have been over 45 years of age. It may be that stronger physical and social barriers preclude the older women's attraction to nontraditional occupations.

The East Bay region from which AFW recruits its trainees has a heavy concentration of industries such as steel companies, automobile and truck manufacturers, and shipyards. Most of the jobs have been traditionally male dominated and tightly controlled by unions. Except for the World War II period, few women have been employed in such jobs. An advantage the program enjoys is that although the area from which AFW can enroll participants is limited to specified locales in the East Bay, the job placement area is not restricted. The rapidly expanding electronics, semiconductor, and computer industries in other regions of the Bay Area have created an intensive search for technical workers, a situation which AFW already plans to use to its advantage.

Program Staff (Figure 1 provides an organizational chart)

The Project Director is the key ingredient in coordinating the activities of everyone concerned with AFW. She not only provides the leadership

for staff and handles administrative tasks, but she also takes the time and effort to know the participants, the training schools' structures and staff, and the community's employers and their needs. As part of the team approach that the AFW staff uses, the Director is involved with every activity carried out by the Center: recruitment, orientation, applicant assessment, program and job development, counseling, training, placement, and follow-up.

It is interesting to note that job descriptions for all staff emphasize abilities and experiences in working with and a commitment to the target population and to the program's goals. Staff members that will build positive working relationships with a wide variety of people--employers, participants, educators, and the community--are vital to the success of any comprehensive social action program. The atmosphere at the Hayward Center reflects the feeling expressed by several participants at a Friday counseling session. They agreed that "...they really care what happens to us and they break their necks to get someone a job."

Program Facilities

AFW is located in a Hayward office building that is easily accessible by public transportation, an important factor for many low-income clients. A positive feature of the building is that it houses legal aid and child-care referral offices. Cross-referrals among the three offices have been common.

Testing of potential participants is done at the Hayward office. The training sites provide the equipment, machinery, or other resources needed for the particular program. Space is available at the Center for participant workshops, group counseling, tutoring, and a library.

Program Activities

Recruiting. Many and varied sources of potential recruits are tapped, through flyers and notices of course offerings sent to community agencies, flea markets, nursery schools, supermarkets, and many other locations where

women are likely to be. The media provide public service announcements on the radio and want ads in local community advertising papers. The Director and Training Coordinator personally speak to administrators and students in area colleges, womens' centers, and adult education centers. AFW's contract stipulates that 25% of the clients be direct referrals from CETA, and several participants verified the fact that they heard about AFW through CETA's mobile job van. The most recent recruitment focus is on high school students. The training specialist has been meeting with counselors and industrial arts teachers to discuss the restrictions that sex-role stereotyping places on students, and to encourage high school personnel to actively recruit females for nontraditional training. "Walk-ins" often seek help from AFW as a result of personal contacts made by women who are already in the program. As role models, those already enrolled offer evidence that Advocates works, and are highly effective recruiters for the program.

Once an individual is interested, the next step is a thorough assessment of their abilities and interests, which includes:

- Personal interviews by a client coordinator and the director
- A personal evaluation questionnaire
- Testing for verbal, math, and manual dexterity abilities
- A review of the various client assessments by staff in order to make a decision on acceptance of the applicant
- Referrals to other agencies if the applicant does not meet the requirements or is not motivated to complete this nontraditional training.

The motivation of applicants to complete a nontraditional training program is a significant factor in deciding whether or not to accept a candidate.

Enrolling the applicants involves filling out the necessary CETA and school forms and providing them with information about class registration and attendance, pay procedures, and books and supplies. Each enrollee is helped with registration procedures and class scheduling for the selected training site, and with developing a personal training program plan. The

community colleges have waived requirements such as providing transcripts of prior education and, in a few instances, taking prerequisite courses that are theoretical, and not applied sciences.

Instructional programs. AFW includes in its training program the facilities and instructors of several existing institutions; two community colleges (Chabot and Laney), two adult education programs (Hayward and Pleasanton), a regional skills center, a regional occupational program, and the carpenter's union. Instruction is offered in welding, electronics technology, machine tool technology, carpentry, and industrial maintenance. Furthermore, new instructional programs are developed in response to the needs of the employers. For example, the booming electronics industry in the Bay Area has created a demand for electronic technicians. Although a large majority of assemblers in those companies are women, the higher-level technical jobs have been dominated by men. Therefore, the Project Director, with the cooperation of Chabot College, has developed a certificated 15-unit electronics program that combines courses from various existing classes, and that will qualify graduates for entry-level technical jobs. Recruiting women to enroll for a January 1979 start in the program is being done, and the outlook for job placement at the end of training is almost certain.

The carpentry preapprenticeship program is another example of a training program that was developed cooperatively through AFW's efforts. In the past, unions have presented barriers to the employment of women, often because their hiring lists are closed, or filled for up to two-year periods at a time. Women now are funneled by AFW into a six-week, six-hours a day, preapprenticeship carpentry program held at the carpenters' training center and taught by Joint Apprenticeship Committee staff. The trainees are paid a stipend from AFW during the training and meet at AFW for counseling, math tutoring, and "sharing their battle scars" every Friday.

When the preapprenticeship training is completed, interviews with building contractors are arranged through AFW, with the help of the apprenticeship coordinator. He feels that "...women have better track records as far as regular class attendance, and the women already hired break the

employment barrier for the rest." Of the almost 1,500 apprentices in northern California, 27 are women, and 8 of those women are from AFW. The coordinator added, "The women going into the job after this training have an advantage--knowing the tools, materials, and terminology. That gives them confidence."

Support services. The California Study on Women in Nontraditional Employment prepared in 1977 by Advocates for Women, San Francisco, documented barriers to equal employment opportunities in the state, identified useful agency services, and incorporated them into recommendations for a model program. The services they determined to be significant factors for programs assisting women into nontraditional employment include most of the support services offered by AFW in Hayward. These are:

- Counseling that helps women to identify abilities and skills, career and personal counseling, consistent follow-up, and just plain encouragement
- Tutoring and remedial work in basic math and language skills
- Career information libraries and materials
- Aptitude and skills testing
- Financial assistance
- Child care, direct or through referral
- Workshops on job-search and job-retention techniques
- Weekly support and information-sharing workshops
- Referral information on available education and training, and legal and financial aid.

AFW staff maintain records for each participant, reporting progress in training and contacts with counseling, tutoring, and instructional services. Stipend checks are distributed to participants every Friday after their attendance record and instructors' comments are discussed. The weekly sessions are planned with the help of participants to be sure that their questions are answered and problems are dealt with as they occur. Near the end of the training period, workshops are designed to teach interviewing skills. Students roleplay job interviews and discuss problems they encounter during actual interviews with employers. One woman, ready for placement

after the carpentry preapprenticeship training, said: "The boss asked about my children and my child-care problem. Can he really do that? He didn't ask the men he interviewed any of those questions." The counselor and other trainees discuss ways to deal with this and related interview problems and situations.

Tutoring, particularly in math, has been especially helpful to participants. Approximately 80% of the AFW enrollees require tutoring in math to deal with the academic work and to meet the testing requirements of employers. Because the tutoring emphasizes the immediate application of basic math, such as measurement in carpentry or metric systems for machine tool technology, the women are motivated to attend the tutoring sessions.

Job development and placement. Maintaining continual contacts with employers is crucial to the program's effectiveness. Changes in the job market needs and in the federal regulations have affected employer demands for qualified women. Therefore, job development is now preceded by program development so that new programs will train women for specific employment needs. For example, suggested course outlines and program descriptions were sent to 35 electronics companies in the area, requesting their recommendations on design of a training program to fit jobs in this field. Their suggestions have been incorporated in the program to begin in January 1979.

Personnel Directors and Affirmative Action Officers of Bay Area companies are also contacted regularly, both to survey projected openings and to present qualifications of AFW women who are nearly finished with their training. Follow-up calls, letters, and personal visits are made to employers referred by unions, training institutions, Chambers of Commerce, and other employers who have hired AFW women.

Trainees begin interviewing 30 to 60 days before they complete training. Coordinators try to place more than one trainee with each employer, to reinforce the previously developed pattern of peer support. After AFW participants are interviewed, follow-up calls to the employers are made to

help AFW staff determine the interviewee's job readiness, and to gather feedback on the program.

ACTEB requires that a 30, 60, and 90-day follow-up of AFW participants be conducted with employers. In addition, AFW maintains especially close contact with the women during the first months of placement. A woman carpenter, during a follow-up visit at a construction site, described her job as "not as bad as you expect after the first week or two. Once you get on the job, the contractor realizes you can do the job." She and other women who were interviewed at various job sites expressed their appreciation for the continued interest of AFW's staff. A personnel officer for a large electronics firm agreed that these staff members "really keep in touch" and that their follow-up procedures encourage women to stay in nontraditional jobs.

Community involvement and support. Advocates for Women is dependent upon and continues to expand its network of community involvement. Several school districts, social service agencies, unions, and funding sources contribute their support by providing referrals for recruitment, training programs, job sites, and supportive services such as child care and legal assistance. The employers' involvement is expanding to provide more than jobs alone, through their cooperation in program development. In addition, an advisory committee with representatives from each sector (industry, education, employment, and social agencies). has been organized and has reviewed AFW's testing and tutoring programs and the academic curricula. They found that the programs met their particular requirements and needs as potential employers. Advocates' president felt that an important feature of the Hayward program has been that staff have "gone directly to the employers to find out where jobs are, devised training programs with local institutions, and used what the community offers."

Costs and Funding Sources

Most of AFW/Hayward's $100,800 budget comes from CETA, through a contract with ACTEB as the prime sponsor. A private foundation has provided $15,000 for fiscal year 78-79, to be used primarily for staff salaries. Stipends for CETA-eligible participants, other staff salaries, and office

expenses are paid from the AFW budget. Training expenses, including instructors' salaries and facility use, are assumed by the institutions offering classes, except that any required registration fees are covered by AFW. Books, personal equipment, and handtools are also purchased for students by Advocates. Students receive $2.90 an hour for the actual number of hours each week they are in class, attending Friday workshops, and receiving counseling or tutorial help.

PROGRAM EFFECTIVENESS

The program is evaluated in several ways, both formally and informally. The prime sponsor conducts a formal yearly evaluation, and reports are submitted regularly to the funding sources and to the central AFW office. Table 1 summarizes the program goals and results for 1977-1978.

Table 1
Enrollment and Termination Data, 1977-1978
Advocates for Women--Hayward

	Goals	Actual	Percent of Goal Reached
Enrollment	44	45	102%
Terminations	36	42	82%
Positive Terminations	32	26	81%
Indirect Placement	19	18	95%
Obtained Employment	6	4	67%
Other Positives	7	4	57%
Nonpositive Terminations	4	15	375%
Carry Over	8	3	38%

Nonpositive terminations include dropouts and those completing the training but choosing not be be employed. The number of these in 1977-78 suggested the need for some changes in planning for the 1978-79 program. "To be on the safe side," the Director said, " we're breaking new ground with unions,

encouraging the support of private employers, and expanding the number of cooperative training sites." In addition, trainees will be allowed a one-week trial period, essentially an exploratory week for them to be tested, to begin hands-on experiences at training sites, and to decide whether the whole program will fit into their lifestyle and family needs. If, during that week, a trainee decides against continuing the program, it will not be counted as a termination, but simply as a step in the screening and enrollment procedures.

Informal evidence of the effectiveness of training programs comes from several sources. Job satisfaction and salary levels are two indicators. Women working at jobs for which AFW arranged training have commented:

> "I'm working outdoors at a job I like. Right now I'm making $6.35 an hour as a beginning apprentice carpenter, I'm going to school one night a week, and in 90 days I'll be making $7.99 an hour."
>
> "Even CETA turned me down when I applied for a parks maintenance job. They chose men instead! Without AFW, they [a pipe company] wouldn't have hired me as a welder if I just walked in off the street."
>
> "I've always liked working with my hands. AFW made the connection for me, for training and the job. They gave me encouragement to do something I've only thought about."

Employers' perceptions are another indicator of program success. Two of them said:

> "I check with her often. She's enjoying the work and is doing a good job. For any woman trained in electronics in this part of the country, the chances are great for her to move up."
>
> "After one year of training in machine tool shop, she's doing very well. She's earning over $8.00 an hour now."

Some of the women have not been placed in jobs because they decided to continue their training beyond the period of AFW's support. A young woman at Chabot said, "AFW helped me through the first year, and now I'm on my own as a second-year student in numerical control--that means programming machines. The job possibilities after this year are great!"

An instructor at Chabot showed his enthusiasm about the AFW program by commenting, "One of the best things is that these women have a high success rate and talk about long-term goals. They're not going to school for a short time just to get any job."

Evidence also exists that the women being helped by Advocates experience changes in their levels of self-confidence. Some of their comments were: "I've learned things I never thought I could do"; "I feel good about accomplishing something in my life, especially not being on welfare or supported by a husband"; and "I could never get any jobs except for low-paying, menial work. Mostly, I had a hard time getting off and staying off welfare." For many of the women, Advocates has given them their first experience and success with something they never thought they could do.

PROGRAM FUTURE

It is difficult to predict the continuation of programs almost wholly funded by CETA. The required placement rates, even for innovative programs, appear high, particularly since such programs are usually intended to help target populations with little or no history of regular work experience. Advocates for Women has attempted to structure its organization to prevent an untimely death. Its immediate future is likely to depend in part on the strength and support of the umbrella agency in San Francisco. Corporate officers are committed to the concept of training women for nontraditional work and are capable of tapping varied sources for future financial support.

Substantial support for Advocates has already been demonstrated by the area community colleges and by the Carpenters' Union apprenticeship program. The Dean of the Vocational-Technical Division at Chabot College praised the recruiting and enrolling of women in technical programs such as machine tool technology and electronics: "The total enrollment for the college is down 10% this year; enrollment in technical engineering courses shows a 57% increase this year. The college administration is pleased that our programs have a total cross-section of students -- the physically limited, all racial

groups, and females in what was a male-dominated program." He added that AFW, through its recruitment efforts, had accomplished the outreach to a target population that an overworked college staff could not.

Apprenticeship programs and employers with federal contracts are also actively seeking women in order to meet new federal hiring regulations. Advocates has forged the first links with unions and employers by recruiting for them and by supplying some of the first trained applicants they have hired. Such links will serve to benefit AFW as it plans for its future.

Changes in the Advocates program have already been made and will continue to be made. The major modifications have been in job and program development. Identifying the available job areas and then planning programs to train women in those areas have been most effective strategies. One problem being worked on currently is finding a way to coordinate the program's funding with the school year. For example, Chabot's school year begins in the middle of September, and the federal fiscal year starts on October 1. Advocates' participants find it almost impossible to register, pay fees, buy books, and support themselves during those interim weeks without their stipends. Yet, if they miss the first quarter, in some programs they also miss a course that may be a prerequisite for the following courses. Discussions are being held in an attempt to solve this dilemma, and it is hoped that an agreement will be reached soon.

An important problem common to many CETA-funded programs is the lack of adequate service to the "working poor." These are the women whose incomes are enough above poverty-level to disqualify them for AFW, but who are nevertheless too poor to enter or continue training programs without financial assistance. Schools are attempting to supplement the incomes of such women with student financial assistance programs such as Basic Education Opportunity Grants (BEOG), but these are usually inadequate for single heads of households.

REPLICATING THE PROGRAM

Advocates for Women has no features that would prevent groups or agencies in other parts of the country from adapting the program. Potential adapters, in the words of the Program Director, must remember that, "There is no shortage of women who need training and who don't want to remain in poverty." Helping those women does require careful attention to the following steps to assure program success:

- Program Planning
  - Detailed planning before funding can prevent serious problems.
  - Thorough assessments of the job market demands and of the available training programs are crucial.
  - Enough time should be allowed to organize an office, hire qualified staff, and establish referral and recruitment networks.
- Program Staffing
  - Sensitivity to the particular target population and its needs is paramount in selecting staff.
  - A knowledge of the community and its employment and educational systems and service agencies should be required of key staff.
- Program Funding and Resources
  - Explore possibilities for obtaining financial support and other resources from a variety of sources, private and public.
  - Consider the use of volunteer staff to augment paid staff services.
- Selecting Participants
  - Commitment to completing nontraditional training should be clearly evident before final selections are made.
  - Establishing a supportive group atmosphere must begin during the first orientation and exploratory week.

- Program and Job Development. These tasks require ongoing attention, and must begin during the planning stage.
    - Intensive, shorter-term, open entry-and-exit training programs should be available, as well as longer-term three-quarter or two-semester programs.
    - Insure job placement by developing specific training to match available job openings in the area.
    - Maintain contact with institutions (administrators and instructors) for cooperative program development efforts.
- Support Services
    - Regularly scheduled counseling sessions are vital to maintain group support and to develop self-confidence in participants.
    - Practical solutions to common problems such as child care and transportation must be provided.
- Follow-Up
    - Placement in jobs or further training should not mean the end of individual or group encouragement and counseling support. Establish methods such as a newsletter and regularly scheduled meetings for women working in similar jobs to continue sharing problems, solutions, and successes.
    - Maintain follow-up contacts with employers to encourage their continued hiring of trainees and to get recommendations for new or revisions for existing programs.

Advocates for Women in Hayward is achieving its goal to train and place women in nontraditional jobs. Problems have occurred, but they have been viewed as challenges, and the agency has responded with creative solutions. As future challenges are faced, this spirit will assure that answers will continue to be found.

CONTACT PERSON AND ADDRESS OF PROGRAM

Ellenor J. Brittain, Project Director
22630 Foothill Blvd., Suite 252
Hayward, CA 94541

NEW VIEW

Mountain View, California

"It's hard at 40 to go after a job after only having classwork. If it hadn't been for NEW VIEW, I'd probably still be just taking classes, but the internship gave me work experience and helped to force me off the dime to start work. I got the self-confidence to handle the work environment."

NEW VIEW Graduate

PROGRAM OVERVIEW

The woman quoted had been an elementary school teacher, but had not worked full time since she left teaching in 1960 to raise a family. After she had attended DeAnza College for one quarter in 1976, her data processing instructor announced to the class that the NEW VIEW (Vocational Internship Education for Women) program was available for interested candidates. She applied, was accepted, and was placed in a 20 hour-a-week paid internship position at NASA, Ames Research Center, about 40 miles south of San Francisco. At the same time she continued taking computer science and accounting classes at the college. NEW VIEW helped her to gain the skills, experience, and confidence that have resulted in her present full-time, well paying civil service job in the Ames accounting department.

NEW VIEW is a vocational education program designed to prepare women for responsible, permanent employment in scientific, technical, and management jobs such as business computer programming, fiscal management, drafting, electronics, and technical writing. It provides classes, counseling, and paid internships to women with good academic records and career commitment but little work experience. The goals are to raise each student's level of confidence and competence, prepare each for employment in technical and scientific careers, and promote positive attitudes in leaders of business, industry, government, and education toward women's career aspirations.

For the past four years, the NEW VIEW program has been funded by NASA/ AMES Research Center, the Foothill-DeAnza Community College District, the Carnegie Corporation, and the Hancock Foundation. The NASA/Ames Research Center pays students participating in the internship $3.25 per hour. Students usually intern 20 hours per week during the regular school year and full time during the summer term. The college district does its part by providing NEW VIEW participants with the appropriate vocational classes.

Current DeAnza and Foothill College women students may apply for admission to the program if they: (1) have at least a B average for a minimum of 12 quarter units; (2) can show career motivation through references, educational background, and paid or volunteer work experience; and (3) are able to commit themselves to participate fully in the vocational courses, the internship, and the counseling activities. Most NEW VIEW participants are between 25 and 55 years old. Some have never worked for pay; others have limited experience. Some have baccalaureate and advanced degrees, others less than a year of college study. An individualized program of courses and on-the-job experience intended to maximize employability is created for each NEW VIEW participant, after careful evaluation of her background, experience, and abilities.

The woman described earlier is typical of the graduates, both in her feelings about the advantages of NEW VIEW and in her job placement. The average full time beginning salary for graduates is close to $1,100 a month. Fifteen women who completed the program are now employed full time at Ames, and others are working at other firms in Northern California, including Hewlett-Packard, Signetics, Intel, Varian, and Syntex.

PROGRAM BACKGROUND AND DEVELOPMENT

Through Foothill College, DeAnza College, three outreach centers, and over 70 off-campus instructional sites, the Foothill-DeAnza Community College District offers lower-division academic and vocational instruction and a diverse range of community services to Santa Clara County residents. Since 1970, the District has awarded credit for learning through its Work

Experience Education plan. Learning is identified and assessed in cooperation with student supervisors by credentialed faculty members who help students integrate on- and off-campus learning.

Modeled after the Work Experience Education Plan, a contract was negotiated with NASA/Ames Research Center at Moffett Field, California, for a student technician program which would provide potential scientists and engineers with a chance to work half-time for a year at Ames while pursuing their first degree at Foothill or DeAnza. By 1974, some 60 students a year were in the NASA program. Very few of these were women, however.

Given the many thousands of adult women enrolled at Foothill and DeAnza in the early 1970s, it became clear to the staff involved with the NASA Technician program that a special effort to enroll women was needed. This effort was directed particularly to those women whose need for career-related work experience seemed most critical--women in their 30s, 40s, and 50s, many of whom had some earlier college education, who were now seeking to enter or re-enter the labor force. A proposal for a program which would make appropriate changes in the existing Ames contract and provide substantial counseling and other support for participating women was developed in the spring of 1974, and in December of that year the Carnegie Corporation of New York provided funding for two experimental years.

Many factors combined to make the program possible. First, NEW VIEW had the support of top level management from the start. The Chancellor of the Foothill-DeAnza District, the Director of Ames Research Center, and Carnegie Corporation officers worked together to arrive at funding patterns and commitments that were acceptable to all three institutions. Second, continuous efforts were made throughout the project to see that the internships provided the women with skills that would allow them to assume higher than entry-level positions. Both project staff and Ames supervisors worked hard to ensure that internship experiences were appropriate for the jobs the women would take. Third, sensitivity was shown to women already working at AMES in lower skilled and lower paying jobs, some of whom saw NEW VIEW as benefitting outsiders but not themselves. The Project Director consulted

with the Equal Employment Opportunities Office at Ames to help these women initiate training programs also.

PROGRAM DESCRIPTION

Target Population

The target population is defined as women with academic ability and career commitment whose opportunities for access to technical, professional, and managerial occupations have been limited. The women are expected to have little or no recent paid work experience, and be between the ages of 25 and 55. The wide age range was evident in one student's remark, "I heard about NEW VIEW and applied because my daughter was in it." In addition, a woman's ability to arrange family responsibilities and transportation so that they can participate in the total program are factors taken into consideration during selection.

Many NEW VIEW assignments represent new careers, or the first "career" at all, of women who majored in traditionally "female" fields during their earlier college careers. A number of former sociology, English, and history majors are becomming programmers. At least eight former teachers, some of whom were only able to obtain substitute teaching, have come into the NEW VIEW Program.

Program Staff

According to the Project Director, there are many people, both at Ames Research Center and at the district office, who have been vital to the successful functioning of NEW VIEW. There are, however, but three paid program staff positions: a half-time Director, a one-fourth to one-half time counselor, and a one-half time secretary.

During the first three years of the program, the directorship was shared by two staff members of the junior college district: (1) the Associate Director of Vocational Education and Director of Cooperative and Field

Experience Education and (2) a staff researcher in Cooperative Education at Foothill College. During the 1978 calendar year the latter assumed full responsibility for NEW VIEW. Prior to directing NEW VIEW, the Project Director had worked extensively in Cooperative Field Education programs in Santa Clara County and had also been active in community and state organizations and activities concerned with the needs of women in education and careers. She feels that the most important qualifications for the job are the ability to effectively coordinate staff, work supervisors, and vocational instructors, and to create a supportive and understanding environment. To achieve such an environment, the Director regularly meets with counselors and faculty at both the Foothill and DeAnza campuses.

Careful selection of the NEW VIEW counselors was felt to be especially important by the Director. Counselors should have experience working with re-entry women, be flexible in responding to students' needs, and have a personal commitment to the program and the issues of vocational equity. The secretary's role is also vital to the program, and they are trained to place the needs of applicants and interns above administrative work. This means that if a student comes into the office and needs to talk with someone, the secretary gives the student first priority. Paperwork waits and the office becomes part of the students' support services.

Program Facilities

The two junior colleges and Ames Research Center provide a wealth of resources and facilities to the NEW VIEW Program. Both DeAnza and Foothill Community Colleges are large, multi-faceted institutions with impressive campuses, highly qualified staff, and large student populations. They offer hundreds of scientific, technical, and business courses taught by California credentialed junior college teachers. The Ames Research Center provides extensive equipment and facilities necessary for aeronautical and space research, at their multi-million dollar plant in Mountain View. These include wind tunnels, weightlessness chambers, animal laboratories, biomedical facilities and equipment, data processing equipment, and generally all the trappings needed for current space and aeronautical research. NEW VIEW maintains offices at both the Ames Research Center and at the Foothill-DeAnza District Office.

Program Activities

Recruiting. NEW VIEW students are recruited at both the DeAnza and Foothill College campuses. The program is publicized using a variety of media, including articles prepared for local campus newspapers, notices posted on bulletin boards, and brochures which are handed out at gatherings likely to attract the target population. Referrals are also made by counselors and faculty members who are aware of the NEW VIEW program--the Project Director spends a good amount of her time keeping them abreast of the program. Still other referrals are made by NEW VIEW interns and recent graduates of the program.

Each prospective NEW VIEW intern goes through a fairly rigorous application and screening procedure. They are required to submit: an application form; references; college transcripts; and a personal statement of about 750 words describing their reasons for applying to the NEW VIEW program, their long-range personal, academic, and career goals, their qualifications for the program, and their anticipated arrangements for dealing with other responsibilities while participating in the program. Subsequently, applicants are interviewed by both the Project Director and the counselor to further assess their motivation and aptitude for the NEW VIEW program. Those applicants with the background and interest appropriate to an available internship and who are able to commit themselves to the program are then interviewed by their prospective supervisors at the Research Center. If both parties agree that the job interests and the available training slot are not compatible, the student is referred to another position.

At the same time that the prospective NEW VIEW intern is applying, Ames supervisors interested in funding an intern position for the next year submit job descriptions to the liaison at the Ames Central Office. Having top-level Ames administrators involved in the process of matching prospective interns with available positions is a critical feature of the program. It assures supervisors that their management supports the program and makes the program an integral part of the Center's operation. The Project Director makes the final decision to accept or reject an applicant after talking with the counselor, Ames monitor, and the applicant's probable supervisor. Of greatest importance in making this decision is finding a good match

between the applicant's career interests and the internship position.

Instructional program. An orientation, involving obtaining a security clearance and taking a tour of the Center, is held before each group begins its first quarter. Responsibilities are explained. The program counselor meets with each participant, and the women confirm their schedules and arrangements with the Ames personnel with whom they will work. Each new student is also given a handbook for participants which addresses the following topics in detail: Development of the NEW VIEW program, components of the program, application procedures, internship assignments, orientation, student responsibilities, and program procedures and records.

Students are matched to appropriate positions selected from about 40 to 50 possible assignments identified by Ames personnel. The list of possibilities in this regard is long, and includes: scientific and business computer programming, accounting, fiscal management, drafting, electronics engineering, procurement, technical writing, chemistry, graphics, computer librarian, data processing, and so on. Although each year's assignments have varied, data processing has dominated the program since its inception; 24 of the first 67 students enrolled have been scientific or business programmers. The next most frequent type of position, business/accounting, has included 14 women.

During the first quarter of the internship the Director and counselor visit each student at her learning station, making sure she is comfortable with assigned duties and that she has significant educational opportunities. At the end of the quarter, the Director and Ames supervisor evaluate in writing the student's accomplishments. These evaluations and each student's written self-assessment are reviewed with each participant by the Director. During the second, third, and fourth quarters, although each student is visited less frequently, written reports continue to be prepared by all three parties. During the fourth quarter, final evaluations are gathered and students review their total NEW VIEW experience.

Each intern takes at least two vocational courses during the fall, winter, and spring quarters. They are selected after consultation with the counselor, Director, and the Internship Supervisor, to be appropriate for the student's internship. A few interns complete certificates or degrees; many more simply take courses in mathematics, science, and communications which directly relate to their vocational goals. A few participants have added classes at four-year institutions to their community college programs. Students are expected to maintain a "B" average during the program year.

Support services. Both individual and group counseling, at regular intervals and by arrangement, are provided throughout the program year. Part of the salary for a credentialed counselor who is a regular member of the district staff is funded by program grant monies. Her time with NEW VIEW students is used for visiting interns at work stations, leading group discussions, counseling individuals, and arranging guest speakers and other program events.

During a student's first quarter in the program, she meets weekly with the counselor and other women in her group. This provides an opportunity to share experiences, to reflect on the adjustments she is making in her own life, and to get to know other women in similar circumstances. This group pursues activities involving decision making, skills identification, values clarification, time management, and other related topics. Both formal and informal communication and assertiveness training begin in the first quarter and continue throughout the year.

During the remaining three quarters of the program, the staff arrange panel discussions and guest speakers, present workshops on women and work, and teach career/life planning skills. As students begin to interview for jobs, after eight or nine months in the program, the staff provides them with references and encouragement. Opportunities are also provided to hear lunch-hour guest speakers, who are often NEW VIEW graduates currently engaged in professional careers. Child care assistance can be obtained through a contingency fund in the budget for those women who would otherwise be unable to participate in the program because of the financial burden that would result.

Job development and placement. Placement into technical employment may occur as early as the second or third quarter of the NEW VIEW internship, if the NEW VIEW student elects to leave the program early to accept full-time employment. Supervisors at Ames are made aware of this possibility from the start. During the fourth quarter of the internship, job-seeking preparations and strategies become the focus of group meetings. NEW VIEW interns are taught how to write resumes and to prepare for interviews. The Director and counselor actively assist with placements, maintaining contacts with a number of companies. A number of fourth-quarter students are referred to NEW VIEW graduates who are already working, often with good results. Some companies have hired several NEW VIEW graduates and are ready to take more. Follow-up information is gathered annually for five years on all participants.

Community involvement and support. The community college district, as a publicly supported educational agency, is closely involved with the community it serves. Increasing numbers of middle-aged women have been returning to the community colleges for training in new career fields. The NEW VIEW program was developed as one response to meet this need.

An Advisory Committee for NEW VIEW was established to link its staff to the various constituencies in the community. The committee included representatives from NASA, the district and its colleges, women's organizations in the community, and authorities in the field of career education and counseling. The committee met quarterly during the first year of the project, but as the NEW VIEW program developed into a smooth operation, the need for meetings decreased. Although the last meeting was held in 1976, the Project Director continues to inform committee members about program activities through annual reports. Committee members are also encouraged to call or write regarding any concerns or suggestions they might have about NEW VIEW.

Costs and Funding Sources

The NEW VIEW program has been supported by funds from four sources: the Carnegie Corporation of New York; the Luke B. Hancock Foundation of Menlo Park, California; the NASA/Ames Research Center at Moffett Field,

California; and the Foothill-DeAnza Community College District. Total annual budgets for NEW VIEW have been as follows: 1975 - $102,240; 1976 - $141,386; 1977 - $153,532; and 1978 - $113,129. Table I shows the percent funding by agency and by calendar year.

Table I

PERCENT YEARLY FUNDING BY AGENCY

	1975	1976	1977	1978
Carnegie	27%	18%	22%	23%
FDACCD	20%	17%	5%	8%
Hancock	-	-	8%	7%
NASA	53%	65%	65%	62%

Although NASA is the largest single contributor, all of the NASA funding goes to pay student stipends, and NASA benefits directly from the work performed by the students. The majority of the remaining expenses are borne by the Carnegie grant, with the exception of indirect expenses such as office space and utilities which are borne solely by the community college district.

PROGRAM EFFECTIVENESS

As of September 1977, 45 students had enrolled in the NEW VIEW program and 42 had completed it. Of the 42 completers, 60% were employed in technical positions and another 21% were continuing in school. By December 1978, of the 103 who had started NEW VIEW, 87 had completed the program and 16 were continuing their education at various colleges in the area. The rate of graduates employed full time in technical fields was 70%.

Perhaps even more revealing has been the reaction of those involved in the program. One woman who completed the program and accepted permanent employment as a scientific programmer wrote:

> My husband was never able to understand my lack of confidence and so is quite pleased with the changes I have undergone in the past months. And I am delighted to realize that a job is not something that must be tolerated in order to earn money, but rather something that can be stimulating and very fulfilling.

Other remarks from NEW VIEW participants include the following:

> It's hard for me to judge how much of my growth was due to NEW VIEW directly and how much the changes were from working with the specific group of people I worked with, but in either case NEW VIEW was responsible. NEW VIEW gave me a chance to make my transition from housewife to full-time employee by way of the only 'outside' activity I was familiar with--school. Without that opportunity, I would still be at home not knowing how to start and very fearful of taking those first steps alone.
>
> Going to school, working, and studying in addition to keeping the family going is a real strain. However, after the year of NEW VIEW, I knew how much work I was capable of handling and what I could expect from my family.

When queried recently about the value of their NEW VIEW interns, a group of three Ames supervisors had the following things to say:

> More than my money's worth. They're like beginning engineers. We have had three NEW VIEW students, two have had BAs in English, but they all picked up programming--no problem.
>
> Having NEW VIEW people has allowed us to do jobs that we wouldn't have been able to do otherwise. We would not have had the money to hire someone else.
>
> Initially, I had reservations about taking a lady who had not worked for years and about whether or not I could keep her busy. The first gal really took off--I've used one of those students at every opportunity since.

Some comments made by women who completed follow-up questionnaires are worth noting. Examples:

> I feel the greatest thing has been my increased self-confidence, both in doing a good job and in getting along with my co-workers, many of whom are half my age or less.

> The self-confidence I have gained through my on-the-job training has had the greatest impact on my life...I feel very confident about finding a job or creating my own career.

Overall, the program is meeting its goal of increasing the number of trained women in scientific and technical fields. Equally significant, NEW VIEW allows Foothill and DeAnza Colleges to offer a unique bridge between school and work for adult women students. Students entering or re-entering college can look forward to a program that will ease their transition into career employment when they have acquired or renewed essential skills.

Likewise, the benefits to Ames Research Center have been substantial, and provide a textbook case of why business and industry have a stake in improving the job opportunities of women. Since NEW VIEW interns are trained and motivated, they very soon turn in high-quality work for the modest rate of $3.25/hour. Thus, the program has provided competent workers at low rates of pay in exchange for work experience in scientific and technical areas. Since the colleges benefit from increased enrollment, a symbiotic relationship has developed that benefits the junior college district, NASA/Ames, and the program participants alike, and this happy outcome is what permits NEW VIEW to flourish.

PROGRAM FUTURE

For the forseeable future, it appears that there will be a need for the NEW VIEW program. The NEW VIEW staff has suggested that the model be expanded to accommodate more of the many women educated in liberal arts and social sciences who need and work and could find it in technical areas. Expansion might involve generalizing the program to other companies and agencies in the area.

Although the Project Director is extremely pleased with the success of NEW VIEW, she would like to see it one day become part of a wider set of programs for women. As it stands, there are many, including minority and low-income women, who need special educational and work experience programs, but who do not qualify for NEW VIEW because they cannot afford to spend a

year being paid only $3.25/hour working part-time, or because the "B" average entry requirement may be too stringent.

REPLICATING THE PROGRAM

The NEW VIEW model and project data are being shared widely through brochures, media publicity, professional journal articles, and reports and presentations to employers and colleges interested in the program. Local newspapers have run stories, on it and a Bay Area television channel filmed two students as part of an educational show on women and careers. The program brochure has been widely circulated in the local community, particularly to women's groups and employers, and mailed to members of the League for Innovation in the Community College. The January 1977 American Vocational Journal included a short discussion of the program, and many readers have inquired for further information. The first public showing of a slide-show about the program was presented in 1975 at the national meeting in Denver of the Society for Field Experience Education; other showings have since been held on the West Coast. Colleagues from several community colleges have expressed interest in starting similar programs.

Exploratory discussions have been held with personnel of several major West Coast firms about adopting the NEW VIEW model, and more meetings and other dissemination efforts have been planned. Members of the Bay Area network to encourage girls and women in math and science, centered at Mills College and the Lawrence Hall of Science at the University of California, Berkeley, have expressed interest in disseminating the NEW VIEW model.

More generally, there is no reason why the program couldn't be adapted to other similar regions of the country. In particular, locales with private industries requiring skilled technicians and with public community colleges offering vocational programs could use the NEW VIEW organizational model to develop their own cooperative effort. By combining the vocational programs in technology with challenging internships, women in many locations could obtain good-paying, semiprofessional jobs in male-dominated occupations.

Factors critical to successful program adaptation of NEW VIEW to other cities include:

(1) Obtaining administrative cooperation from all sectors: public education, private industries, and funding agencies.

(2) Defining clearly the functions of each sector and identifying the responsible individuals and departments.

(3) Ensuring that vocational internships are productive learning situations and not "make-work" exercises.

(4) Matching job market requirements to vocational programs and to internship responsibilities.

(5) Providing counseling services that enable mature women to share problems and build personal and work-related confidence.

The NEW VIEW staff and students look forward to assisting other two-year institutions and industries around the country that might be interested in adopting the NEW VIEW model.

CONTACT PERSON AND ADDRESS OF PROGRAM

Peggy Shoenhair
Office of Technical Education
Foothill-DeAnza Community College District
12345 El Monte Road
Los Altos Hills, CA 94022

AREA VOCATIONAL PROGRAM

Adams County, Colorado

"My name is Micaela Macias. I am 42 years old. In May of 1976 I received my GED. It had been a lifetime dream to return to school so I could get my diploma. Before then, most of my married life I had spent raising a family of eight and it kept me very busy. Then one day my sister told me about the Area Vocational Training School, so I decided to call and see what they had to offer. I was lucky when I was told I could go back to school and get my diploma. It was very difficult at first but I wasn't going to give up and I never missed a class. After I got my GED I decided to continue my education, so I enrolled in accounting. I enjoyed that class very much. Area Vocational helped me to find a job after getting my certificate. I am now employed at General Novelty as an accounting clerk and I enjoy my work very much."

Excerpt from AVP Slide/Tape Presentation

PROGRAM OVERVIEW

Adams County is one of four surrounding Denver. It is unique among the four in that it contains a relatively high percentage of educationally disadvantaged, low income residents. Almost half of the adult residents lack a high school diploma, dropout rates in the county's high schools are well above the state average, unemployment is above the state average, welfare case loads exceed the combined total of the other three counties surrounding Denver, families on public assistance increased 95% between 1970 and 1975, and 14% of the county's residents are Hispanic.

In 1974 the Area Vocational Program (AVP) entered this scene with the goal of providing the means for Adams County adults to acquire prevocational and/or entry-level vocational skills that would result in placement on a job. A focus on nontraditional training for women has been a part of the program's mission from the start, although men are also welcome. Courses are offered, in the evening, through four participating school districts, in the following fields: machinist, mechanical drafting, clerk/typist,

accounting clerk, business machine repair, and meatcutting. Other services include GED and ESL instruction, tutoring, vocational testing and counseling, job placement, and follow up.

Since its inception AVP has served 360 clients, over 200 of whom have taken vocational classes. Each year the program has cost less than the money saved in public assistance support to program clients who were unemployed, plus taxes now being paid by these working people. Thus on balance, it is more than paying for itself. Eighty-six percent of those taking classes are women, and 25% are Hispanic. Fourteen percent of AVP's placements are in nontraditional employment.

PROGRAM BACKGROUND AND DEVELOPMENT

The Area Vocational Program, now in its fourth year, grew from an inauspicious beginning in 1971. At that time a consortium of five school districts and the Youth Services Bureau mounted a campaign to combat the high dropout rate in Adams County schools. With approximately $20,000 from these two sources the consortium hired two people to run this dropout recovery project. One of these people became the founding "mother" of the AVP program.

Many obstacles were encountered in establishing the dropout recovery program, but despite these, it became clear that the original mission was being met by the program: dropouts were, in fact, returning to school. Unfortunately, returning dropouts, finding nothing different at the schools to keep them there, often dropped out again. A scathing yet honest report at the first year's end confronted the project's governing board with the unsolved problem and made this challenge: "Let us start an adult vocational program to help people gain skill in training for and finding jobs." The challenge was accepted and in 1974 the focus was changed to adult training.

A proposal was written to the Colorado State Board for Community Colleges and Occupational Education (SBCCOE) requesting a grant for the new training program, which was funded. Support was also sought from the Adams

County Manpower (CETA) Administration which eventually supplied funding for one part of the program. While the new program was (and is) open to anyone 17 years or older, the average age of participants is now approximately 25. One recent Program Coordinator explained that most of the program's enrollees have first been through the "school-of-hard-knocks." That is, they have dropped out, have worked at low-paying, dead-end jobs, and have tried to support their families on poverty-level incomes and public assistance welfare payments before coming to AVP.

AVP began offering occupational training in the fall of 1974. AVP's founder characterizes AVP in those days as a "floating area vocational-technical school," where the program contracted with CETA/Manpower for special services, was funded by the Colorado State Board for Community Colleges and Occupational Education, was sponsored by five (now four) small school districts, and lacked a true "parent" organization of its own. The basic concept was, and still is, to use existing buildings, equipment, instructors, and organizational systems of the schools to provide vocational training, while maintaining independent contracting arrangements with CETA and individual employers. A governing Board of Directors, made up of the vocational directors of each of the four sponsoring school districts, administers the program and coordinates AVP offerings with cooperative adult education programs and vocational programs in the home high schools.

Program Goal

The goal of the AVP is to provide the means for Adams County adults to acquire prevocational and/or entry-level vocational skills that result in placement on a job. The program offers GED (general educational development, a program leading to a high school equivalency diploma) and ESL (English-as-a-second language) instruction, vocational testing and counseling, vocational skill training, and job placement and follow-up services. All services are offered at no cost to qualifying Adams County residents. To qualify for AVP services, a resident who is at least 17 years old must meet one of the following conditions: (1) lack a high school diploma or GED; (2) be a recipient of public assistance payments; or (3) meet federal minimum income guidelines. Being somewhat more restrictive, the CETA-sponsored GED/ESL component requires that the last condition be met in all cases. Additionally,

no students will be admitted to the vocational training classes unless they have a specific occupational objective and fully intend to secure training-related employment upon completion of training. All students are asked to sign training agreements indicating their intention to seek employment.

Due to the predispositions of AVP's initial and subsequent staff members, an implicit goal of the program has always been a focus on nontraditional training for women. AVP specializes in nontraditional job training by offering a wide array of support services, workshops, and counseling approaches that assist women in exploring nontraditional careers.

PROGRAM DESCRIPTION

Target Population

The Denver metropolitan area is surrounded by four outlying counties. Adams County is unique among these suburban counties in that it is far more depressed economically and has additional social problems not shared by neighboring counties. A high proportion of Adams County youth and adults are educationally disadvantaged. According to the 1970 census, nearly four of ten adults in the county lack a high school education. The four Adams County school districts now sponsoring AVP and who are served by AVP all have dropout rates above the state average of 7.8 percent. These rates range from 10.7 percent to 20.2 percent for the 1975-1976 school year.

A high dropout rate brings with it a high rate of unemployment. The youth unemployment rate in Adams County is above the state average at 16.7 percent. Among the counties surrounding Denver, Adams County's total unemployment rate is exceeded only by the Denver metropolitan area itself.

The indices of economic health recited above do not fully reflect the unique social problems plaguing the county. In a publication entitled The Cry of the Poor, Adams County was labeled a "Welfare Mecca." This publication, published by the Adams County Welfare Advisory Board in 1977, cited the following statistics and made these observations:

- Adams County is carrying a disproportionate share of the welfare caseload among the four suburban counties. Adams County ADC (Aid to Dependent Children) caseloads exceeded the combined caseloads of the other three counties.

- The percentage of families in Adams County whose income is below the poverty level has risen from 5.6 percent in 1970 to 14.5 percent in 1975.

- The number of families on public assistance within the county increased 95 percent from 1970 to 1975.

- Almost half of the Adams County employees with incomes over $10,000 live outside the county, thus benefiting neighboring county revenues, not those of Adams County.

- Adams County has both the highest minority population and the highest percentage of low-income housing among Denver's surrounding counties. (The predominant minority in Adams County is Hispanic, which represents 14.1 percent of the county's population.)

- Comprehensively, Adams County appears closest in economic and racial makeup to metropolitan Denver, indicating a spill-over of social problems from that city.

Since its inception, the AVP has assumed an active role in efforts to overcome sex role stereotyping in vocational education. This posture has been particularly necessary in that over 80% of AVP's clients are women. Of these, many are heads of households who are also welfare recipients. In order to train the female head of household for a career in which she can be self-supporting, AVP offers training in nontraditional fields and encourages women to enter these occupational areas. The reasons for this effort are clear. Traditional "female" occupations rarely pay enough for a head of household to support a family. For example, in September of 1977, approximately 38% of all clerical openings appearing on the Colorado Job Bank files were paying wages at less than poverty level for a family of four. Many welfare recipients find it more desirable to remain on welfare than work for poverty wages, especially when taking a low-paying job usually means added burdens of child care, transportation, and health care costs.

Program Staff

The Area Vocational Program staff is composed of four positions: the Program Coordinator, two Vocational Coordinators (Job Counselor/Developers),

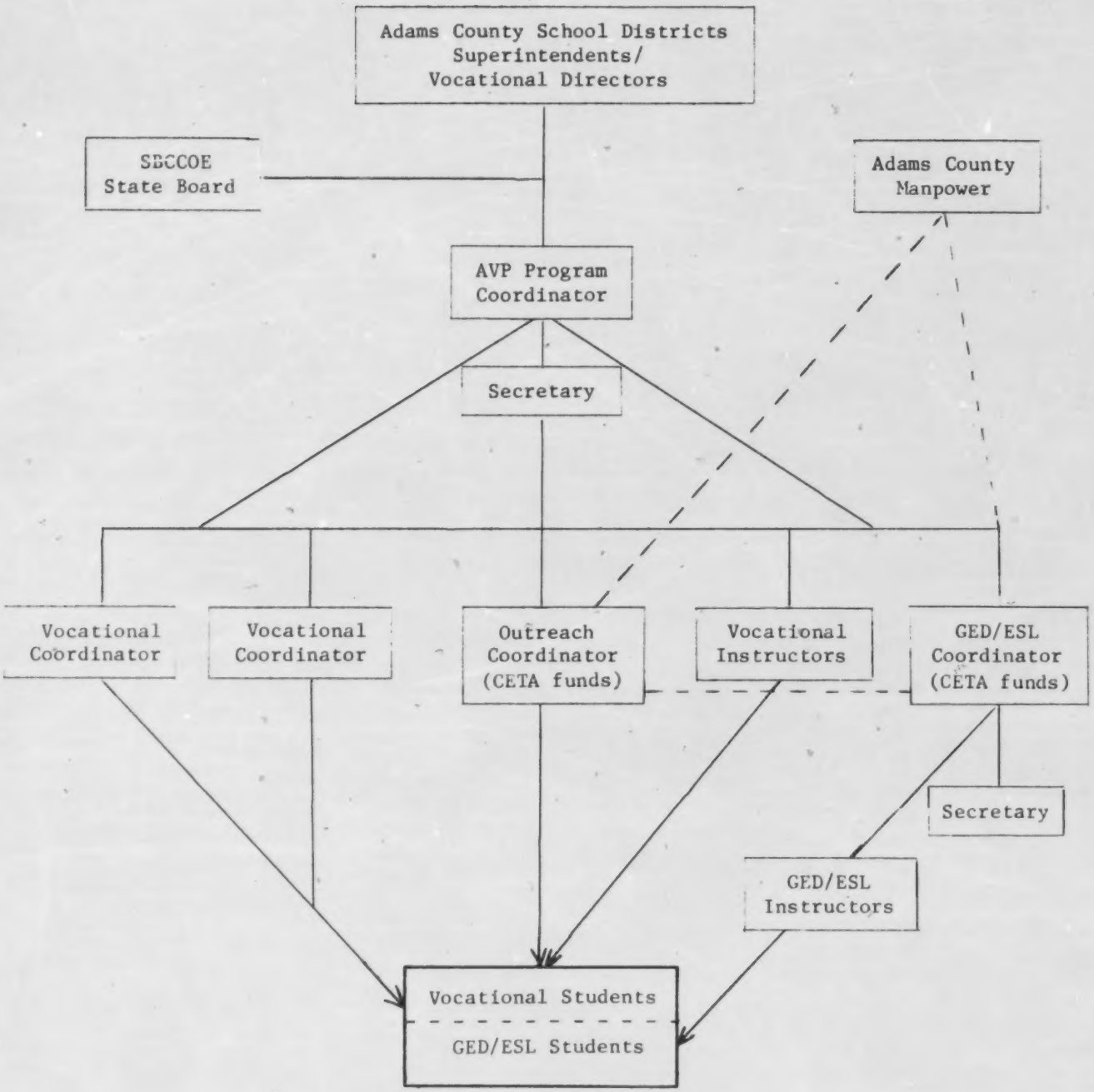
and a secretary. Additionally, CETA funds the position of Outreach Coordinator, which serves both the State Board-funded AVP vocational component and the Adams County Manpower (CETA-funded) GED/ESL component. The GED/ESL component, which includes a Coordinator, secretary, and several instructors, is considered an independent entity, notwithstanding the fact that the two components are housed in adjacent office spaces, serve similar clientele, and are both run by the Program Coordinator. Figure 1 presents an organizational chart showing the above interrelationships. The duties of the AVP staff members will be discussed later under Program Activities.

Many of AVP's vocational educators hold regular daytime positions as full-time instructors with one of the four sponsoring county school districts. AVP hires these instructors to teach on a part-time basis approximately 12 hours per week in the evenings. Almost all of the classes that have been offered by AVP over the past four years have met either three hours per class for four nights per week (Monday, Tuesday, Wednesday, Thursday) or for four hours per class for three nights per week (Tuesday, Wednesday, Thursday). Many instructors have also been hired directly from industry and are hired to teach part-time three or four evenings per week while holding their regular daytime jobs. Even the instructors who are hired while holding daytime teaching jobs have strong backgrounds of on-the-job, industrial experience. The AVP program also provides two tutors to supplement vocational classes. These tutors, in reading and math, provide assistance several nights a week during regular class time if students need extra help.

Historically, turnover has been quite high in the regular AVP staff positions. In fact, the program often operates with less than the four AVP positions filled. Several reasons have been offered for this. One is that there is little real upward mobility in AVP positions. A second is that the Colorado State Board has imposed certain credential and other requirements for the position of vocational coordinator, including five years of job placement or counseling experience. Third is the fact that AVP's future is based on year-to-year funding, which makes the positions insecure. It is perhaps significant that the program has achieved what it has in spite of these handicaps.

Figure 1

AVP ORGANIZATIONAL CHART



Program Facilities

The program staff of AVP and its GED/ESL component are currently housed in offices (old classrooms) in a county alternative school building. Except for actual vocational instruction and outreach activities, almost all of AVP's activities--counseling, testing, job development, placement, and follow up--are conducted from this site.

The bulk of AVP classrooms, facilities, and equipment is provided in the form of in-kind contributions from the four participating Adams County school districts. Classes are held in schools throughout the county. All necessary equipment, such as drafting tables and tools, typewriters, adding machines, heavy grinders, lathes, drill presses, micrometers, and so on are currently available or are furnished by the cooperating school districts. Counseling and tutoring space, building utilities, custodial maintenance, insurance, furniture usage, and administrative support are also donated. The 1978-1979 AVP budget request to the State Board estimated these in-kind contributions to be $111,284. This figure exceeds the operations budget of $95,000 for the entire AVP program.

One point stressed by AVP staff members regarding their program is the location of the various classes. AVP offers its classes at facilities (usually high schools) in various neighborhoods throughout the county. Enrollees come almost exclusively from the immediate neighborhood where the class is offered. Whether this phenomenon is peculiar to a disadvantaged population or due to recruiting and publicity efforts, it suggests this may be an important factor to consider when deciding the best strategy for reaching a specific target population.

Program Activities

Recruiting. The main function of the CETA-funded Outreach Coordinator is recruitment, although other staff members also get involved in various recruiting efforts. The current Outreach Coordinator is a "graduate" of AVP. She got tired of factory work, learned about the GED classes available, and soon earned her GED. She became a secretary (she is bilingual) for the GED program and since August 1977 has worked as Outreach Coordinator for AVP's vocational component and for the GED/ESL component.

Many recruiting strategies are utilized by AVP. Brochures, flyers, and AVP's own newsletter are distributed at shopping centers, job fairs, to all agencies and businesses in the county, to churches, parents' groups, health clinics, food stamp centers, laundromats, low-income housing areas, trailer courts, and are sent home with all high school students. Ads are placed in community newspapers and in other agency newsletters. Radio public service announcements and a television spot have been conducted. Job Fair booths, Job Clinics, and an ongoing workshop series have proven to be useful recruiting tools. Role models of successful women in nontraditional careers are used whenever possible as speakers at these functions.

A color slide/tape presentation was produced by the Outreach Coordinator which describes the AVP program. By presenting it and describing the program to the more than 50 community agencies and service groups in the county, an effective cross-referral system of community services has been established. Another avenue, "word-of-mouth," is one of the most common reasons students mention when asked how they first learned of AVP.

Instructional Programs. The fundamental principle that characterizes the vocational offerings of AVP is that each class or course is conceived, designed, and implemented in response to employer needs. Only by adhering to this guide has AVP been able to consistently maintain a high placement rate. An example of this involves the meatcutting course that was originally offered by AVP. The Denver area had been for many years a primary beef processing center for the Midwest. In response to this inherent demand for butchers and meat-cutters, AVP designed and offered its 16-week "Beef Boner" training class. Training, job development, and placements were going fine until the fall of 1977. At that time a severe economic crisis struck the larger packing plants in Denver and caused many meatcutting companies to go out of business. In response to this development, AVP terminated its meatcutting program.

Since its inception, AVP has offered a variety of courses, including manufacturing machinist, mechanical drafting, clerk typist, accounting clerk, business machine repair, and originally, meatcutting. Two other courses have been designed and proposed for the future, oil field production

and diesel mechanics. Only lack of a suitable instructor is currently preventing start of the oil field production class. Diesel mechanics is scheduled to begin in 1979. The newest addition to AVP's repertoire is an eight-week electronics assembly course which began in November 1978.

The relatively small classes (10-20 maximum enrollment) are designed to be self-paced and individualized. To the extent possible, they are also open entry and open exit. Time frames have been established but serve only as guidelines. No traditional grading system is used, which helps to reduce the fear of failure. Instead, positive, success-oriented approaches are used to encourage progress, which is evaluated according to skills acquisition, performance levels, and competency testing. Math and English tutors are available to assist with these basic areas as they relate to the vocational training area. Staff for these positions are screened for their ability to relate to disadvantaged persons.

When a need for a new class is perceived, instructors are sought from the school districts and the community. The instructors and AVP then draw up a tentative training plan which is critiqued by potential employers and other industry people. AVP eventually forms a specific industrial advisory committee composed of these employers, instructors, and AVP. This new advisory committee finally approves the new course, as does the Governing Board of Vocational Directors for AVP.

The content of each course is designed to provide realistic expectations of what work on the job is like. Several of the shop courses are organized and operated similarly to shops in industry. This feature is important in maintaining AVP's credibility with employers. The following comments of several employers indicate their reaction to AVP's training:

> "The instructors have a good relationship with industry. They know what we want."
>
> "They teach what it's really like--the monotony, the boredom. Their women tend to stay longer on the job."
>
> "They teach that the machine shop is dirty...Other schools don't.... They get out to industry a lot. Other schools don't take the initiative to arrange tours and all."

"They don't lead students on...and they won't shove people down your throat, like others. I feel I can hire someone based on their (instructors') word."

Following are the comments of two AVP instructors:

"My name is on the line...I provide all-around training because I want my students to be 'job-ready'."

"'Employable' is the name of the game. We're successful because we know we can employ them (women)."

A recently instituted "crash" machinist course reflects AVP's flexible approach to programming. A local machine tooling company contacted AVP in October. Although it knew the regular machinist class takes 33 weeks to complete, it nevertheless needed ten new employees before the end of the year. A cooperative arrangement was devised wherein AVP would recruit and train the ten needed people in an intensive 65 hour course. The company conducted a pre-employment physical to screen prospective trainees. AVP then screened applicants using the General Aptitude Test Battery (GATB) and other interest inventories. The services of the counseling staff were utilized for intake interviews, training orientation, job assessment, and, for women, a special orientation to nontraditional employment. The class met Friday nights and all day Saturdays for 12 hours per week. Thanks to the close cooperation between AVP and industry, ten previously un- or underemployed individuals have desired jobs.

An experiment will also be tried over the Christmas holidays to see if a "super-intensive" training effort can produce employees with entry-level skills in two or three weeks. One of the dedicated machinist class instructors has agreed to this undertaking and is now planning this eight hour-per-day, five or six day per-week intensive course.

Support Services. All enrollees in AVP, whether initially seeking vocational training or GED, make use of the counseling services of the Vocational Coordinator. This Vocational Counselor is the enrollee's link to a variety of services offered by AVP. The goal of AVP's counseling services is to provide the individual applicant with the necessary information regarding her or his interests, needs, and abilities so that appropriate

decisions regarding vocational choice can be made. To facilitate this goal, each applicant receives an orientation regarding the purpose and structure of AVP. During this application process, each person participates in an intake interview, training orientation, and job assessment. This process provides information for the individual and AVP staff regarding the applicant's social and economic needs, academic skills, personal support needs, and vocational goals and aptitudes.

A variety of vocational aptitude and interest tests are used, including the General Aptitude Test Battery, Kuder Interest Inventory, the California Test of Basic Skills, and the Strong Campbell Interest Inventory. It is emphasized to applicants that career choices should be based more on these measures rather than on traditional sex roles.

A second important measure for making vocational choice is that of economic need. Female heads of households are asked by counselors to complete the Minimum Salary Checklist and the Job Needs Checklist which detail an individual's income and job requirements. These checklists clearly reveal to each applicant realistic income needs to run her household. It focuses the applicant's attention on many factors that an inexperienced employee may not consider. After these factors have been assessed, counselors then discuss realistic career options with the applicant.

All students enrolled in AVP classes are required to participate in a six hour Job Skills Clinic. These clinics are designed to give students job seeking and job retention skills as well as to help students deal with employment barriers. (See Figure 2 for an outline of the Job Skills Clinic.) Throughout training, each student receives individual attention from the counselors to identify and then to design a prescriptive program to help them overcome their employment barriers.

An ongoing series of free workshops are sponsored by AVP with these and other titles: All about ESL; Assertiveness Training; Everything You Ever Wanted to Know about GED; New Directions for Women; Child Care and Transportation; Grooming; Getting Your Driver's License; Money Mangement; Coping with Stress; Going Back to Work--How to Begin; Women and Anger; and The Independent Woman.

Figure 2

AREA VOCATIONAL PROGRAM -- JOB CLINIC GUIDELINES -- 1976-77

I. JOB SEEKING

- A. Filling out application blanks
- B. Interview techniques
  1. questions to expect (handout)
  2. questions to ask in an interview
  3. how and when to discuss salary
  4. interviewing hints
  5. sample phone calls
  6. closing the interview
  7. thank you letters
  8. why employees fail in the interview (handout)
  9. weaknesses - how to correct them
- C. Know your qualifications
- D. Prepare your campaign
- E. Be resourceful
- F. Giving up is losing

II. JOB KEEPING

- A. What to expect on the job
  1. working conditions
  2. getting along w/supervisors and co-workers
  3. unions - pro and con
  4. hours, wages, merit increases, etc.
- B. What to do if you lose your job
  1. six major job retention problems
     a. absenteeism
     b. tardiness
     c. quality of work
     d. quantity of work
     e. problems w/co-workers and supervisors
     f. outside problems (health, family, transportation, finance)

III. RESUMES (samples and handout)

IV. FORMALIZED JOB DISCUSSION IN CLASS

- A. Weekly sessions - held by teachers
  1. discuss Help Wanted ads
  2. discuss varied job titles, qualifications, etc.
  3. develop "I want to work" attitude.

V. JOB CLINICS

- A. Student responsibility
  1. attendance mandatory
  2. inform staff and/or teacher when ready for job search
- B. Staff responsibility
  1. regularly scheduled job clinics
  2. continual support and discussion re: jobs throughout training
  3. support on a one-to-one basis until student is placed

One example of the type of "full service" counseling that AVP offers involves transportation. One problem that AVP encountered was that some counselees who were sent off to Denver and elsewhere for job interviews were often missing appointments, sometimes making the poorest of excuses. A little probing revealed that many of these women had never ridden on a bus and were honestly afraid of the prospect. In response to this need, one vocational coordinator organized and conducted a weekly "bus ride lesson" for anyone who wanted to go. Each week five to ten women would ride into Denver, switch buses many times, walk around public agencies and other areas of interest, and ride back home again. Sometimes a "practice bus ride" would be planned for an individual woman who had an interview scheduled in Denver. It is this kind of tailor-made, individualized service that characterizes the entire Area Vocational Program.

Job Development and Placement. AVP's Vocational Coordinator/Counselor is also the program's Job Development and Placement Specialist. Job development and placement is accomplished primarily through direct contacts with personnel managers of business and industry in the Denver and Adams County areas. The project's various industrial advisory committees assist AVP with job development, as do Manpower, the Colorado Employment Service, Vocational Rehabilitation, and other agencies and organizations.

An important component of the job development process is the prerequisite Training Agreement that each student (and instructor) signs before the beginning of a vocational class. Accompanying the Training Agreement is a detailed training plan which spells out exactly what competencies are expected of all students. Attached to this training plan is a form for periodic progress reviews that is also signed by the instructor and student at the time of each review. Additional placement services include providing help with job application procedures, resume preparation, mock interviews and other job-seeking skills. AVP has on occasion even helped with the typing of resumes and application forms.

AVP is continually updating and expanding its list of contacts by conducting workshops, attending Job Fairs, scanning the want ads in the newspaper at least once a week, and by utilizing the suggestions of AVP's

various advisory committees and its network of community agencies. Program staff give talks to various service groups (Elks, Kiwanis) to "improve our image," but also in the hopes that the effort may develop into a job lead. Instructors also have contacts with industry and can often "put a good word in" for a promising student. One employer reports that over 50% of those applicants sent to her by AVP are offered a job after the initial interview. The comparable placement rate for applicants "off the street" is approximately 10%.

Follow up is conducted on all students who enter the program in order to monitor success on the job, prevailing wages being paid, and to evaluate training and placement effectiveness. Data are sought on enrollees at intervals of 30 days, 90 days, 180 days, and one year after completion of training. Some of these data are summarized later in the Program Effectiveness section.

Costs and Funding

The area Vocational Program's budget request from the Colorado State Board for Community Colleges and Occupational Education (SBCCOE) for the 1978-79 year totaled $95,677. This grant covers staff salaries and benefits, instructor costs ($7.50/hr. average), tutor costs ($6.00/hr.), communications, equipment maintenance ($1,500/yr.), consumable supplies, testing materials, and a small amount for travel costs. Also covered is $2,000 for administrative functions performed for AVP by one of the four sponsoring school districts.

Another source of revenue for AVP is a contracting arrangement that has been established with both the Adams County CETA and Adams County WIN programs. These two federally-funded programs can pay AVP $1.79 per hour for training time and other AVP services conducted on behalf of CETA and WIN program referrals. This extra income can amount to approximately $10,000 to $15,000 per year. As mentioned earlier, CETA also funds the AVP position of Outreach Coordinator, which amounts to $10,000 per year.

As mentioned previously, in-kind contributions from sponsoring school districts amount to approximately $111,000. This includes classrooms,

machinery and equipment use, administrative support, custodial maintenance, and utility costs. There are no "out-of-pocket" costs for participating school districts. Local industry has on occasion made in-kind contributions of materials, such as scrap steel for the machinist course, and has made available plant time and equipment and machinery for special training programs.

PROGRAM EFFECTIVENESS

AVP measures program performance in real dollar cost effectiveness terms. They do this by computing the total amount saved over and above the SBCCOE grant amount by calculating the amount of Public Assistance payments foregone and the amount of state and federal income taxes paid as a result of AVP placement and gainful employment.

For students trained during the 1975-76 program year, over 60% of those who were placed on jobs were still working after a year on the job. As a result of AVP training and subsequent job placement and job retention, approximately $65,520 has been saved in public assistance support, while an estimated $26,760 in taxes was being paid by formerly unemployed persons. The combined one-year savings exceeded the amount of the SBCCOE grant ($86,100) by $6,180.

Figures for the 1976-77 program year are similar. After six months on the job, approximately 82% of those placed were still working. While full one-year savings figures were not available, total program savings after only six months had already exceeded the amount of the SBCCOE grant by over $14,000. And for the 1977-78 program year, AVP's figures indicate savings of approximately $100,000 over the SBCCOE grant amount.

The average salary of workers who have been placed by AVP in nontraditional areas since 1975 has been approximately $8,700 per year. This compares with an average wage of approximately $6,550 per year for the AVP clerical training placements.

Other statistics of note include the following:

- Over 360 students have been served by AVP since September of 1975. Over 200 of these enrolled in AVP vocational classes. Of these 200+ students, 86% are female and 25% are Hispanic.
- AVP places more students than the number who finished training, usually placing a number before training is completed.
- Approximately 30% of enrollees drop out of the program before completion.
- Eighty-four percent of placements obtain jobs in their training-related area.
- Thirty-eight percent of placements obtain employment in Adams County, while most of the balance work in the Denver metropolitan area.
- Fourteen percent of AVP's placements are in nontraditional employment. The program's first male clerk typist was recently employed after successfully completing the program.

PROGRAM FUTURE

Almost without reservation, all parties involved with AVP's future agree that prospects for the continuation of the program appear excellent. A representative of the Colorado State Board says that AVP is "easy to justify" in light of its proven cost effectiveness. He claims that it is "little hassle" to the Board and clearly meets the federal vocational education legislative mandates. He has always had hopes that the program will be a model for the state, one that eventually can both serve and share the resources of school districts, local industry, the courts, and agencies such as Manpower and the Colorado Employment Service. He has always thought that the probation department of the court system could benefit from a program such as AVP and would like to see their participation.

The one male member of the Governing Board of Vocational Directors (the other three are women) of the four school district consortium that sponsors AVP feels the program has been "very successful" in placing people in jobs and training people for GED's. He admits that if the SBCCOE grant and monies from Manpower were withdrawn that AVP would be in "a very sad

and shaky financial position." He feels the program should have financial support from local industry. He also admits that the administrative burden of getting the cooperation of four usually independent school districts has had its difficulties, but that with the commitment to AVP of the Governing Board of Vocational Directors it has worked.

The Program Coordinator of AVP points to one development that may jeopardize the program's future. Over the past year or so, AVP has begun to feel the squeeze of regular adult education enrichment and other programs in securing classroom space and other facilities. Adult education is growing rapidly and often is able to generate some income through class fees for the school districts, an advantage that AVP does not enjoy.

REPLICATING THE PROGRAM

The only substantive prerequisite to replication of a program such as AVP that appears to be beyond the direct control of program organizers is the economic base from which the program proposes to operate. The conditions that AVP has "inherited" include the following: A very high unemployment rate, good access to a 'healthy' job market (Denver), and a low income base in the community served. Also, there was no vocational-technical school or other similar vocational training program already existing in Adams County before AVP.

The following factors have been posited by at least several people involved in one capacity or another with AVP as being among the most important features that have contributed to AVP's success:

- Flexibility with regard to a changing economy. A program of this type must remain sensitive to employer needs.
- In a program of this type, which serves a disadvantaged, low income clientele, location of facilities is critical. A "neighborhood" approach to training appears to be the best way to reach the target population.
- In order to maintain credibility with employers, thorough screening of applicants to insure a positive motivation for obtaining and retaining a job is important.

- A program of this type must have the cooperation of sponsors who can supply the necessary equipment and facilities for vocational training. A new program cannot expect to be able to purchase the expensive machinery necessary. Also, a program should realize that the least out-of-date equipment can only be supplied by industry itself.

- It appears to be economical and practical to combine complementary services in adjacent facilities and under a single broad program. A disadvantaged population often can benefit from both GED and ESL training as well as vocational training. In fact, completion of a GED itself can show prospective employers certain valuable traits, such as ambition, desire, initiative, dependability, and persistence.

- Lastly, the dedication of staff members cannot be over-emphasized. Over and above any academic or other qualifications required, it is essential that program staff be committed to sex equity and be committed to helping disadvantaged people.

CONTACT PERSON AND ADDRESS OF PROGRAM

Ms. Pat Salas
Vocational Coordinator
Area Vocational Program
1200 E. 78th Avenue
Denver, Colorado 80229

WENDI

Brevard County, Florida

"I feel born again. Every woman needs WENDI. Now I know I count--I can do anything."

A WENDI Student

"Seeing women grow is the strongest part of the program. WENDI Facilitates transition into work or school."

A WENDI Staff Member

PROGRAM OVERVIEW

Martha, mother of five and grandmother of one, had worked as a typist and secretary to help her husband support their family. But it was difficult for her to find work, and the situation had eroded her self-image. She went to the CETA Diagnostic Center for assistance, and they referred her to WENDI (Women's Education Development Incentive), a six-week course offered through Brevard Community College. Here she found other women in similar positions. Some were women who wanted careers and did not know how to go about obtaining them, some wished to improve their education but were afraid to start, some simply wanted to improve their self-image. They ranged in age from 18 to 70. The course attempted to give each the support, training, and direction needed for them to meet their needs.

Brevard County is located near Cape Kennedy in eastern Florida. It is a relatively depressed area economically, and a sizeable number of the women who take the WENDI course are from minority groups. The course is offered through Brevard Community College, a three-campus institution serving residents of the county. The focus is on developing self-confidence, realistic career goals, and job-finding skills. Activities range from values clarification, decision-making skills, assertiveness training, and physical fitness to interest and personality testing, learning about career opportunities, writing resumes, and interviewing.

From October 1, 1977 to July 31, 1978 WENDI served 259 CETA women; of these, only 18 made "non-positive terminations." Sixty percent of WENDI graduates are placed in education or skill training, many in nontraditional fields, and 20% are placed directly in jobs. Follow-up surveys indicate that course graduates have improved self-confidence and self-esteem. The American Association of Community and Junior Colleges and the Association of Community College Trustees have both recognized WENDI as an exemplary program.

PROGRAM BACKGROUND AND DEVELOPMENT

In 1968 a new president was appointed at Brevard Community College, Cocoa, Florida. Soon after his appointment, he set up a Council for Continuing Education for Women, comprised of volunteers who would promote continuing education for women in the community. Inspired by this organization, an Associate Professor of Communication of BCC wrote a grant application in 1974 for a "transition" course for women. This course was designed to help women seeking education and/or a career to identify their goals and map out a plan of action. The program was given $20,000 and WENDI was on its way.

Several factors combined to help WENDI survive. The woman who conceived the program and wrote the grant application had been on the faculty of BCC for ten years and was well known at the college and in the community. The President of the college was a firm supporter of programs for women and of women's education in general, as was the Board of Trustees. The community has also given considerable support to the program. And the program was conceived to fulfill a genuine need, which caused it to sell itself without undue outside support.

WENDI established itself from 1974 to 1976, at which time a program entitled Work Opportunities for Women (WOW) was initiated by the Dean of Special Programs. Funded in the fall of 1976, through a Title III CETA grant, WOW provided women with training in nontraditional vocational fields while upgrading skills in management and communication. The major thrusts

of WOW included Vocational Training in Nontraditional Areas, On-the-Job Training, and Job Readiness Classes. The program was aimed at the disadvantaged women in Brevard County.

After the WOW one-year pilot program grant expired in 1977, many of its goals and programs were absorbed by WENDI, particularly those relating to women setting career goals and pursuing nontraditional careers. WENDI staff are well versed in these topics because most of them were involved in WOW.

In the broadest sense, WENDI is maintained by the people of Brevard County, who support Brevard Community College. Within the college, three programs (WENDI, the CETA Skill Training Office, and the Office for the Continuing Education for Women) are directly under the jurisdiction of the Dean of Special Programs, who is also the Director of WENDI. Her position and that of WENDI in the BCC organizational structure are shown in Figure 1.

PROGRAM DESCRIPTION

Target Population

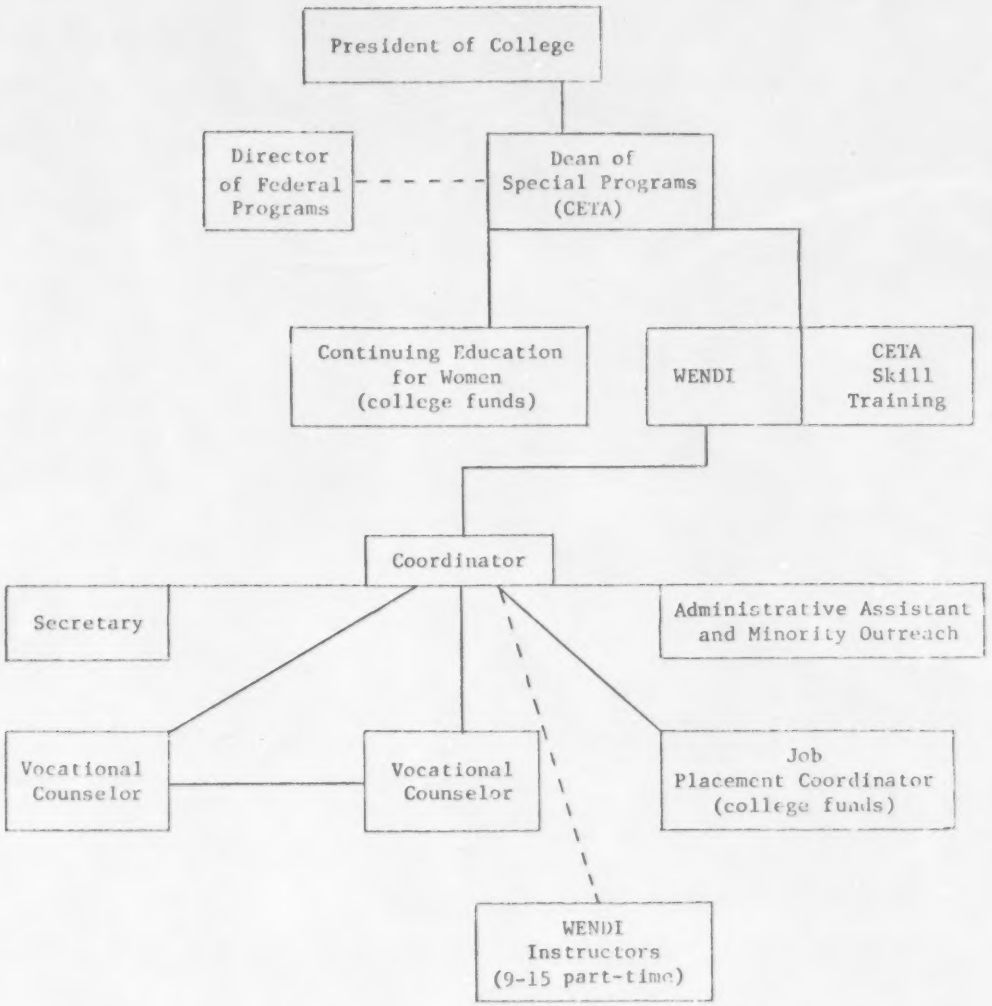
Brevard County, located near Cape Kennedy, has seen boom and bust. In earlier times a southern rural community, the county prospered in the 1960s, then declined when the space business declined. Recently attempts have been made to rebuild the economy, although the unemployment rate in September 1978 was 9.2%. Employment density is highest in professional and technical occupations, which represent 26.7% of the jobs in the county.

The participants served by WENDI range in age from 16-70, with the largest percentage in the 35-55 age group. They come from all socioeconomic backgrounds. Their formal education spans third grade through college, the largest group being high school graduates. Of the toal participating, one-third are single, one-third are married, and one-third are changing their marital status. Few women entering the course have marketable job skills; 90% either have never been in the larbor market or have not worked in from 5 to 20 years.

Figure 1

WENDI POSITION IN THE

BREVARD COMMUNITY COLLEGE ORGANIZATIONAL STRUCTURE



For administrative purposes, a distinction is made between CETA and non-CETA participants. The former must qualify under the CETA guidelines, which involve having an income below a specified level or a disadvantaged background. The course costs non-CETA participants $12, while CETA participants attend free and receive a stipend, plus transportation and child care support. Certain classes are reserved for the CETA participants, a stipulation of the grant.

A tally of CETA participants from 1 October 1976 to 30 December 1977 shows 54% in the 22-24 age range. Sixty-three percent had completed high school, 51% were white, 48% minority, 79% unemployed, and 4% handicapped. The total number of women served by WENDI during this period was 607.

Program Staff

There are seven core staff in the WENDI program. The Director of the program is also Dean of Special Programs. A Coordinator runs the day-to-day operation. She is assisted by one person who serves in a dual capacity: Administrative Assistant and Minority Outreach Coordinator. Two Vocational Counselors are also available to participants in the program. A Job Placement Coordinator, employed by the college, is available to the program and is considered a WENDI staff person. And the part-time WENDI teachers (9 to 15) are essential to the program, although they are not officially college employees.

The Dean of Special Programs, the Director of WENDI, has a long history of interest in women's causes, grants writing, administration, and community college teaching. Her responsibilities with WENDI include:

- Directing all CETA programs associated with BCC.
- Supervising the Continuing Education for Women and WENDI programs.
- Disseminating information about WENDI to regional and national meetings.
- Handling all fund-raising and grant writing for CETA and women's programs.

The Coordinator of WENDI directs day-to-day activities, and in particular is responsible for the teachers. In WOW she was Outreach Job Coordinator, which made her responsible for coordinating the program with business and industry and arranging for training and placement, tasks she contributes to currently. She feels that this public relations experience, in addition to her studies in business administration and her teaching experience, all provide her with useful experience for the position.

The Minority Outreach/Administrative Assistant position is held by a women with a background in social sciences and social work. In her recruitment of minority women, she maintains liaison with social service agencies and CETA. Among her major duties are:

- Recruiting and assisting minority women; doing the CETA paperwork for these women.
- Assisting the Coordinator and the Director in running the program.
- Handling follow-up on WENDI graduates.

The two Vocational Counselors are responsible for:

- Counseling WENDI participants: Helping them register for school, discussing personal problems with them, assisting them with vocational plans.
- Administering two tests to each WENDI class: The Johansson Career Assessment Inventory and the Myers-Briggs Personality Test (that links types of personalities with vocations).

One counselor, who has a strong background in social work, also presents a slide talk that is used for recruitment. The other, with a background in guidance and teaching, does inservice and training for WENDI teachers and contributes to the curriculum.

WENDI employs anywhere from 9 to 15 instructors during an academic year. An average of six classes are held each quarter among the three BCC campuses. The instructors are not regular community college faculty, but individuals selected by WENDI for their knowledge of and sensitivity to the topics taught in the courses. Many have a background in psychology. All take the course themselves before teaching it. Instructors emphasize different aspects of the curriculum, working from a set of handouts on a variety of subjects (which are detailed in the "Instructional programs" section to follow). An attempt is made to adapt the course to the needs which stand out in each class of participants.

A Job Placement Coordinator, who is hired by the college, is available to WENDI participants. This person helps participants to map out job plans

and find employment in the community. Much of the former is done within the WENDI curriculum.

Program Facilities

WENDI sponsors classes at all three community college campuses, and has its administrative offices and counseling facilities at one of the three, the Cocoa campus. In recent years the program has been housed in the administration building, as well as having ancillary counseling facilities in a trailer within the industrial and technical complex.

Program Activities

Recruiting. Recruitment and public relations are the responsibility of all staff and teachers, although some devote more time to these activities than others. The Minority Outreach Assistant has as her major function the recruiting of minority women. Other full-time and part-time staff members donate time for efforts they make within the community or for talks they give to WENDI classes. Emphasis in these recruitment talks and slide shows is placed on the program's efforts to introduce WENDI participants to nontraditional training and to place them in nontraditional jobs. To date, through its recruitment efforts, WENDI has made 16,890 telephone contacts, 23,773 mail contacts, and 1,825 seminar contacts. It has also contacted 465 local employers. Its contacts with community organizations total 5,327.

The media is used for some forms of recruiting. At public meetings staff members distribute the WENDI brochure, special flyers, and copies of class schedules. The local newspaper has consistently given good publicity to all phases of the program. Articles are written about new features and newsworthy items (funding, awards, and special placements). Class schedules for each quarter are printed in the paper.

Instructional programs. Each six-week WENDI class is taught by one Facilitator/Instructor. The class is described as follows in the class schedule:

> VOCATIONAL READINESS-JOB PREPARATION (WENDI): A self-development course to assist women in transition to develop self-confidence,

a positive self-concept, realistic career goals, and job-finding skills. The following activities/tools are used to achieve this objective:

- Interest and personality testing
- Communications training
- Values clarification
- Problem solving, decision making, and goal setting skills
- Physical fitness, relaxation techniques
- Resume writing
- Interviewing
- Information on legal rights, financial planning, nutrition, and grooming
- Information on training and career opportunities
- Assertiveness training
- Career counseling
- Job reports
- How to develop job leads

The core curriculum consists of a number of handouts that have been compiled by staff and teachers since the inception of WENDI. The handouts are on the topics listed in the class description. There are no textbooks, although most classes are given a bibliography of suggested readings. Each instructor adapts the course to her style and the needs of the class. For example, one teacher administers two psychological tests and includes sections on values clarification, decision making, goal setting, preparing a typed resume, researching a job, and undergoing an interview with someone in the community. Another places more emphasis on goal setting. All the instructors and staff agree that this flexibility represents a strength of the course, allowing individualization, and facilitating communication among participants. There is emphasis in all sessions on changing behavior and preparing for a career.

The typical WENDI course lasts for six weeks; a participant can expect to spend three hours per day, five days a week, during the six weeks, for a total of 90 hours. This does not include hours spent in counseling, using the college's learning center, visiting the placement office, or in other class related activities. Partly because of the concentrated schedule participants often form close ties with their teacher and 15-22 classmates.

Support services. The major support service, which is inherent in the WENDI philosophy and program, is the counseling provided by the two Vocational Counselors. Peer support is an important element of the course. Many ex-participants keep in touch with each other; often an entire class will have a reunion. Child care is subcontracted to CETA.

Perhaps the most significant support is offered by the community college. Participants in WENDI are invited to continue in other Brevard courses, especially in nontraditional training programs. While participating in WENDI, women can use the Career Development Center, which offers vocational evaluation and provides individualized instruction on a variety of topics (algebra, reading comprehension, programming, listening, test taking). All other services of the college are open to WENDI participants.

Job development and placement. Job development is an integral part of the WENDI course. It is a central focus of the curriculum, and each enrollee is encouraged to develop her own career plans. The college's Job Placement Coordinator, described earlier, is available to help participants find and secure jobs, and maintains contact with community organizations and local businesses as a part of this effort. In addition, the Florida Employment Service, a state agency, is officially commissioned to help place WENDI participants.

In the early phase of the program, follow-up letters to employers were written by the college Placement Office; now this function has been assumed by the WENDI staff. Currently, the staff is refining a tracking system that will follow a student from the time she is referred to WENDI until she is securely employed. The WENDI Coordinator, in particular, keeps in contact with all graduates. She feels, "The success of the program is measured by the follow-up. I'd say we have a 90% success rate."

Community involvement and support. A WENDI/WOW Advisory Council was initiated in the spring of 1976, and is comprised of 19 members. It meets two times a year to discuss various aspects of the program. Members include a reporter from the local newspaper, a representative from NASA, a representative from Family Services, a Florida state legislative representative who

lives in the district, a representative from the community, representatives of varied private industries, and private citizens interested in the program. The Dean of Special Programs hopes to add some representatives from nontraditional trades.

Since its inception, WENDI has built its foundations in the community. Contacts have been made through speeches, orientation meetings, and referrals, and have included such groups as the Cocoa Kiwanis Club, NOW, and the Women's Department at the University of Florida. The staff has prepared a list detailing "outside agency support" which includes various women's groups, service clubs, schools and colleges, government organizations such as NASA, business associations, mental health and rehabilitation organizations, and others. In short, the program has come to be well known in the community.

Of particular importance to the program is its contact with local employers. Often the program can immediately place a recent graduate because other WENDI or WOW graduates have made a name for these programs in a particular industry. To date, WENDI has made 465 contacts with local employers. The Personnel Director of one of these companies commented on the benefits of WENDI to the employer and to the prospective employee: "The WENDI resume is impressive. Most of our applicants just write down their name and the position they are applying for. WENDI teaches women to design a resume and to submit it typed. The WENDI graduate has also developed an excellent self-image. Because of this, she interviews well. She often refers back to WENDI as the source of her success. The graduates often say that WENDI changed their lives."

Costs and Funding Sources

WENDI is primarily funded by two sources, CETA and Brevard Community College. Each contributes equally to the program. Additional monies come from the Vocational Divison of the state of Florida. The 1978 annual budget totaled approximately $150,000. Funding is an annual worry, as with any program dependent on yearly grants.

PROGRAM EFFECTIVENESS

Documented evaluations of the program are made as required by the funding organizations. Monthly and quarterly reports are made to CETA, and an annual report is submitted to BCC. These reports testify to the fact that WENDI is meeting its specified objectives.

One measure of the program's success is its placement record. Sixty percent of course graduates are placed in education or skill training, and 20% are placed in jobs. About 10% enroll in nontraditional programs at Brevard Community College. These women have been trained in machine tools, cabinet making, masonry, air-conditioning, auto machinist, drafting, and welding.

Another outcome measure is that of changed attitudes among course completers. According to the Director: "Three-month and six-month follow-up questionnaires illustrate that the women who complete the course have a more positive view of themselves and a more concrete, realistic grasp of their identity and goals in life. Pre-test and post-test instruments also indicate a positive increase in self-confidence, self-identity, and goal-setting. These tests include the Tennessee Self-Conflict and the Adult Nowicki-Strickland/Internal-External Test. Above all, test results indicate an increase in self-esteem."

Evaluation is also made in terms of enrollment and attrition. Enrollment is viewed as a key figure. For example, in the period from 1 October 1977 to 31 July 1978, WENDI served 259 CETA women. Of these, only 18 made "non-positive terminations."

WENDI has been recognized as an exemplary program by the American Association of Community and Junior Colleges and the Association of Community College Trustees, both located in Washington, D.C. In addition, the Director was designated "Woman of the Year" for 1978 by the American Association of Women in Community and Junior Colleges.

PROGRAM FUTURE

Because WENDI is set in a community college, its future will depend largely on the demand for the program in the community and on the support of the college. Another crucial factor will be funding. The program will need institutional funding from the college, but will also have to rely on some outside source. The college has integrated the WENDI program into its structure to the extent possible; services such as child care must be provided by the community, or from state or federal funds.

The basic WENDI goals, philosophy, and core course receive many accolades from participants, staff, teachers, and community. Nevertheless, various changes have been suggested. The Dean of Special Programs feels that the program would be guaranteed a life if grants were prepared and written much further in advance of their deadlines. She would also like to increase the nontraditional focus in WENDI, to adopt even more of the goals of WOW. She would like to see WENDI bring in the younger women (ages 14-21). And she would like to build a stronger network of women's centers within the state.

REPLICATING THE PROGRAM

Information about WENDI has been disseminated to 116 community colleges in 39 states through an organization called the ACCTion Consortium, a federally funded (U.S. Office of Education) program designed to provide "multipurpose technical assistance" in program development to two-year colleges. Community colleges must qualify as "developing institutions" to receive this assistance. The fact that the President of Brevard Community College is on the Coordinating Board of ACCTion has probably aided dissemination of WENDI to this group. In addition, the Coordinator of WENDI reports that many other organizations are requesting WENDI literature.

The Dean of Special Programs has acted as a consultant on WENDI at community college conferences and other national meetings. This has provided both exposure and feedback for the program. She has also helped other colleges in Florida by providing information about WENDI.

There have been formal efforts through the ACCTion Consortium to replicate WENDI in other parts of the United States. The community college at the University of Toledo has a program similar to WENDI, named "WENDI." In addition, Arizona Western in Yuma, Arizona, Moraine Park Technical Institute in Beaver Dam, Wisconsin, and Jacksonville Junior College in Jacksonville, Florida have replicated all or part of the program.

The Dean of Special Programs feels there are several factors important for replication. These include the cooperation of community programs and agencies, the full support of the adopting college, and access to alternative funding sources. She also feels her staff are ideal because they have the ability to work within a loose structure and still be closeknit, perform in a variety of roles, and have rapport with women of differing backgrounds.

Other factors important for replication include effective support services, and fitting the program to the needs of the women in a particular community. One of the employers who hires WENDI graduates feels that the existence of many educated people within this Florida community has provided WENDI a sympathetic and supportive environment. She feels that the very transience of the community has eased the accommodation of the program to the community. She fears possible "opposition to this type of program in a tradition-bound community."

CONTACT PERSON AND ADDRESS OF PROGRAM

Muriel Kay Elledge, Dean of Special Programs
WENDI
Brevard Community College
1519 Clearlake Road
Cocoa, Florida 32922

PROJECT MOVE

Ithaca, New York

"I wish all teachers could participate in this course. We've seen very positive changes in awareness about human liberation. Our team's inservice at our school is like casting seeds out--some fall upon rocks and some on fertile ground. But students in my classes now know about many more options."

Industrial Arts Teacher

PROGRAM OVERVIEW

The teacher cited in the quotation is a member of a team of educators from a suburban school near Rochester, New York. She is enrolled in a graduate course offered through Cornell University. This six-credit, two-semester course is designed to "Maximize Options in Vocational Education" (i.e., MOVE) to reduce sex-stereotyping and bias in vocational education in New York State. Participants include staff from the system of regional vocational schools located around the state, as well as those from regular high schools working with students likely to go on for vocational education. Topics treated in the courses include sex stereotyping, legislation, the labor force, sexism in textbooks and career education materials, adolescent attitudes and expectations, and teacher influence on adolescents.

The courses are offered at a variety of sites around the state, and are taught by the MOVE staff members, who travel from their offices at Cornell for the monthly classes. When participants have finished the course, they carry the materials and message back to other teachers, counselors, and administrators at their local schools, holding workshops and providing instruction themselves. In addition, MOVE has begun to work directly with students, largely through the development and use of an "Expanding Roles Kit" which teaches students about stereotypes, sexism, and family and work roles.

While it is difficult to measure the effectiveness of Project MOVE in terms of student outcomes yet, other gauges suggest considerable impact. Over 5,000 teachers, counselors, administrators, and students have been exposed to the course content either through the original course or the local school activities. Evaluation instruments built into the course materials show that course completers have better understanding of sex stereotyping than do nonparticipants. And participants report a heightened awareness of sex stereotyping in their schools, and the beginning of a student movement toward nontraditional vocational programs on the part of both males and females.

PROGRAM BACKGROUND AND DEVELOPMENT

The major purpose of Project MOVE's statewide inservice program is to sensitize vocational educators so that they can help to change the sex-stereotyped attitudes, behaviors, and expectations of educators and students. While that has been the purpose since initial six-hour workshops were conducted in 1977, what has evolved is far more than was envisioned when the original proposal was funded by the state. Evaluations of the early workshops clearly indicated the need to work with vocational educators on several levels, tasks that could not be accomplished in one short workshop. Therefore, Project MOVE was expanded to include the following objectives:

- To train teams of vocational educators, counselors, and administrators to become change agents in their schools and districts.
- To provide a six-credit, two-semester graduate course and a support system that will increase vocational educators' effectiveness as leaders and change agents.
- To continuously evaluate and refine project and course activities and materials.

The development of course and resource materials has also gone through an evolutionary process. After a thorough search of existing materials, a comprehensive 138-page source book, entitled Expanding Adolescent Role Expectations, was published in September 1977. It has proved valuable for a number of reasons: it is directed to secondary vocational and occupational

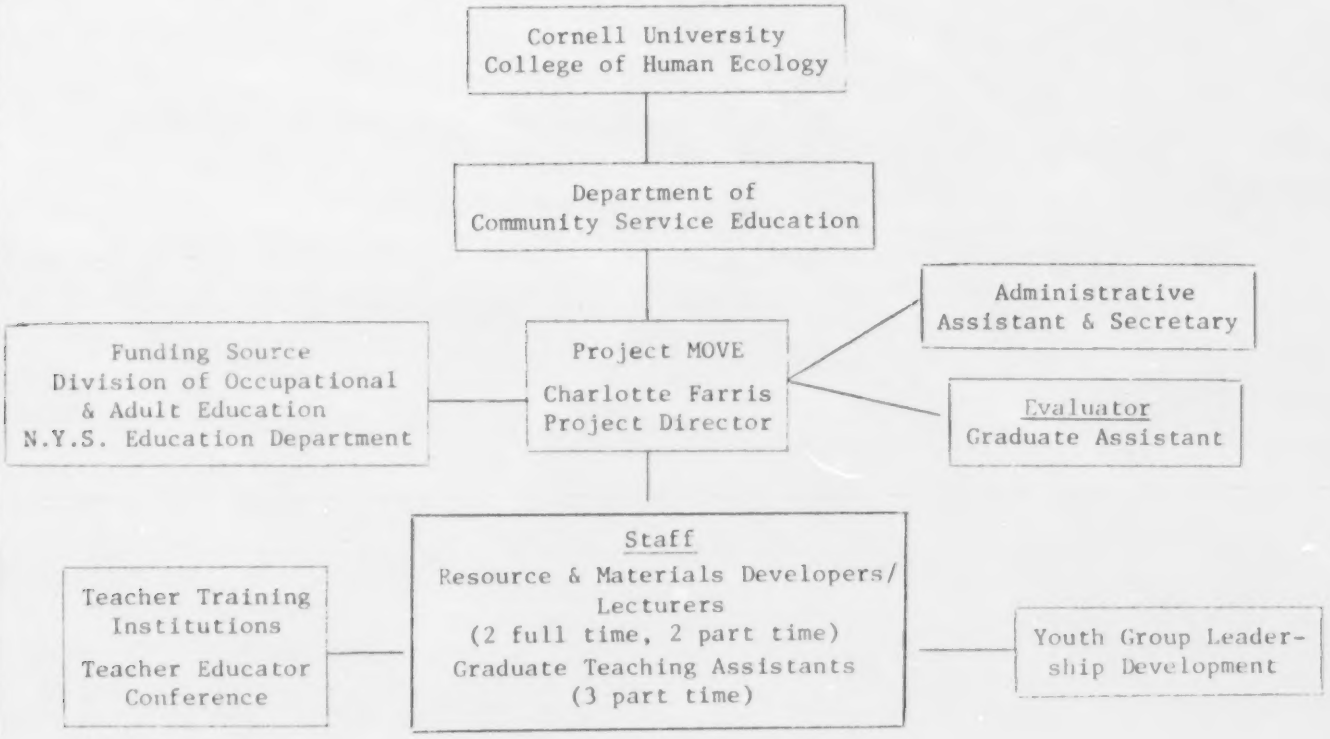
instructors, it deals with both Title IX and the 1976 Vocational Education legislation, it includes both male and female perspectives on stereotyping, and it provides an overview of changing sex roles in occupations, the home, and society in general.

In addition to the source book, a series of learning packets were developed for course participants to use individually and during class meetings. These focus on four main topics: Issues in Vocational Education, Evaluation, Strategies for Change, and Communication and Facilitory Leadership Skills. These topics are used to structure the two graduate courses.

The Project Director and her staff are housed in the Department of Community Service Education in the New York State College of Human Ecology at Cornell University. The following diagram illustrates the program's links to the State Department of Education and to Cornell, and shows the staffing pattern for core faculty.

PROJECT MOVE

ORGANIZATIONAL AND STAFFING CHART



PROGRAM DESCRIPTION

Target Population

Boards of Cooperative Educational Services (BOCES) are regional schools in New York State that offer vocational courses and training, and other special programs, to surrounding school districts. Comprehensive and vocational high schools also provide instruction in a wide variety of occupational programs. Teachers, counselors, and administrators from these institutions, as well as from high schools that send students to BOCES institutions, are all potential participants in MOVE.

While an attempt has been made to include all types of locales and all school staff, some have quite naturally proved more receptive than others. Thus current efforts are being redoubled to reach those in rural as well as urban locations, those in academic as well as vocational schools, and administrators as well as teachers and counselors. Administrators, for example, have been less active as participants than teachers and counselors. The State Sex-Equity Coordinator feels that "...the greatest impact of MOVE has been with people from BOCES and the major cities. Recruiting at small school districts and with administrators will be concentrated on this year."

Two additional populations of adults who are targeted for this year's efforts are adult leaders of vocational organizations for youth, and faculty members at vocational teacher training institutions. Advisors for groups such as 4-H Clubs, Future Farmers of America, and Future Homemakers of America have reviewed learning packets and will be using them to develop leadership skills in students.

The graduate courses were taught originally during the 1977-1978 academic year, and included 80 participants in four cities: Ithaca, Auburn, Syracuse, and Rochester. Classes were almost evenly divided by sex, with 55% of enrollees female and 45% male. The average age was 39, and two-thirds of participants had permanent teaching certificates. Forty-six percent held bachelor's degrees and 41% master's degrees.

Students are part of the target population in the sense they are the ultimate beneficiaries of the adult activities. Vocational instructors whose attitudes and classroom behaviors change as a result of participating in the graduate courses have a direct impact on students. As part of an action plan developed during the course, one teacher set up an exploratory nontraditional program for both boys and girls. All 9th grade students in the school attended classes in all the occupational clusters.

The Summer 1978 Leadership Camp Program also directly affected students. Boys and girls representing six vocational education student organizations attended, learning about sex stereotyping while assessing the materials and activities being pilot tested. As student leaders are trained in their vocational clubs, they too will become trainers and role models for other students. Another avenue of participation for high school students has been the evaluation of their teachers, using a checklist of sex-fair behaviors, an activity which also allows them to examine their own attitudes and stereotypes.

Program Staff

Figure 1 provides an organizational chart for Project MOVE, and shows how it fits into the Cornell University administrative structure. It also shows the staff who work for MOVE: a Project Director, two full-time and two part-time Resource and Materials Developers/Lecturers, three part-time graduate Teaching Assistants, an Administrative Assistant/Secretary, and an Evaluator. In any class, a group (generally three) of these individuals works together to provide the instruction, conduct the evaluation, and make sure things go smoothly. This use of teams enables the program to tap the particular capabilities and talents of each person. Some have teaching backgrounds in vocational education, others have writing and editing experience. Some are paid staff members and others are graduate students learning practical applications of theoretical knowledge. All of the staff, whatever their background or skills, are committed to the issues surrounding sex-role stereotyping. Equally crucial to program success has been the mix of male and female lecturers and assistants. New staff have been added for the 1978-1979 school year through additional state funding.

Teamwork is especially necessary and evident considering the materials and equipment carried by the staff, and the long drives necessary to meet with classes across the state. Each MOVE team is responsible for reviewing and responding to learning activities and projects submitted by class members at the end of the monthly meetings. The action plans developed and implemented by each school team are also followed up and evaluated by staff. This consistent feedback to participants has provided support and consistency to the statewide effort to improve sex equity practices.

Program Facilities

No special facilities are required for Project MOVE beyond adequate office space for staff and central meeting places for class members. MOVE has ready access at the university to audiovisual equipment, video tape machines, and reproduction facilities. Since the program has developed many learning packets and resource materials, the university's reproduction capabilities are often used. Classes meet in rooms at various high schools and BOCES centers and state cars are available for staff to travel to class sites.

Program Activities

The major activity carried out by MOVE is the training of vocational educators to become change agents in their own schools and districts. Throughout the program, the use of supportive teams has been emphasized, both with MOVE staff and with participants. In fact, teams rather than individuals are recruited from schools and districts.

Recruiting. The program's Administrative Assistant contacts school and BOCES districts by telephone and mail to give administrators information on the content and objectives of the courses, the delivery system, and the benefits to students and faculty. Follow-up contacts to interested administrators are usually made in person by the Director or MOVE staff members. With each successive course, recruiting in new locales becomes easier. Inquiries about the program are increasingly being received from teachers and counselors who have heard about the course by word of mouth from friends or at conferences.

The suggested criteria for selecting team members for the course include:

- As individuals, they should be full-time vocational teachers, administrators or counselors; have leadership ability and the respect of other faculty; be receptive to new ideas and educational methods; and be involved in school and community affairs.
- As a team, members should represent several vocational areas, and as many secondary schools within a district as possible. One team member should also have administrative responsibilities.

Although there is no cost to participants or to the districts for the two graduate courses, one financial barrier to recruitment has been the reluctance of some districts to have their faculty earn additional graduate credits, as they may then have to be paid a higher salary. If this happens to several teachers from the same district at the same time, it may cause problems for budget-conscious administrators. Contrastingly, earning six graduate credits that are tuition free has been a great incentive for most participants. One possible resolution is to recruit more administrators as students in the hope they will recognize the value of the program to the district.

Instructional programs. The topical outlines for the two graduate-level courses are provided in Table 1. The four major content areas are integrated throughout both courses and within each learning packet. Except for the initial and last classes which are six hours long, classes are held after school hours once a month for three hours.

The nine learning packets are:

(1) Sex Stereotyping: What, Why, How

(2) Legislation: Know the Law

(3) Changing Labor Force and Family

(4) Adolescents: Attitudes and Expectations

(5) Teachers Make a Difference

(6) Sexism in Textbooks and Career Education Materials

Table 1

TOPICAL OUTLINE FOR CSE 607 AND 608

CSE No.	MAJOR CONTENT AREAS			
	Issues	Evaluation	Strategies for Change	Communication and Facilatory Leadership Skills
607	Recent legislation, federal and state policies that affect focational education Changes in the labor market and family, and implications for voc. ed. Expectations and attitudes of adolescents, implications	Assessing knowledge and attidues about issues and change Assessing behaviors Random sampling techniques Development of items for instrumentation	Restraining and supporting forces for change Theories of organizational change Theories of attitudinal change	Maintenance and task functions Individual and group decision making and problem solving Establishing group goals
608	Identifying and dealing with sex stereotyping and bias in: program and curriculum materials, testing and measurement, career education materials Sex fair teaching and guidance	Factors influencing data collection Data gathering techniques Steps in conducting survey Administering questionnaires Descriptive statistics Interpreting results Formative and summative evaluation	Principles of change Models for change Role of change agent in schools	Communication skills (with individuals and groups) Interviewing techniques Leading discussion groups Dealing with controversy and conflict
GENERAL COURSE OUTCOMES: Planning and conducting a program or worshop Evaluating Title IX and BOCES plans for meeting state and federal requirements Planning, implementing and evaluating projects for facilitating change Developing proposals for possible funding for projects				

(7) Critiquing Media and Tests

(8) Using What You've Learned (Project and workshop reports)

(9) Putting It All Together (Includes proposed writing, assessing districts' progress in implementing Titles IX and II)

Evaluation of the packets is conducted regularly. Each student's perceptions and evaluations of every activity and reading are noted on a log worksheet that is turned in at the end of the class period. Evaluations of the class session are also collected by staff, and both forms of feedback are used to delete, add, or change the materials, activities, and the class structure. The Project Director notes: "The reviewing and debriefing sessions after each class usually result in modifying materials and methods. For example, the learning packet on legislation was moved closer to the beginning of the course because students needed that knowledge for subsequent classes."

Each learning packet is organized according to the same general format, and contains: learning objectives; assigned readings related to the main topic; discussion questions; learning activities that may include collecting and analyzing data, conducting activities with students or other faculty, practicing leadership skills, or planning one's own inservice program; a log for evaluating the packet; and other materials such as new resources and questionnaires. Class implementation guides to use with each packet were developed and revised by the staff, and include a checklist that (1) enables staff to prepare carefully for each class meeting, (2) plan enough time for each activity, and (3) have step-by-step directions readily available. This helps to insure consistency across sites. No matter where or to whom the classes are taught, consistent procedures and quality are maintained.

Activities planned and carried out by participants differ widely, depending on the participants' needs. Each team of "students" assesses its own school or district and decides on a major project that is realistic and that will result in some measureable impact. Examples of projects carried out by class members around the state include:

- Reviewing materials for bias and recommending sex-fair texts.
- Establishing resource centers in libraries or teacher centers, that include information on Titles IX and II, and sex-fair career materials
- Teaching minicourses to students about nontraditional programs.
- Developing special curricular materials and sharing them with other teachers.
- Developing and using various media presentations.
- Conducting inservice workshops on sex stereotyping for school faculty or special groups in the district.

One team's workshop for counselors in their district was so well received they were invited back to conduct a second session. A BOCES team, comprised of a counselor, machine shop instructor, and food services instructor conducted a half-day inservice session for the entire staff at their BOCES school. The counselor also taped interviews with teachers who explained how their programs offered opportunities for nontraditional students, and made videotapes showing students learning skills in nontraditional occupations.

In addition to the graduate courses, Project MOVE carries on a variety of other activities, including a Youth Group Program, the development of media materials, and the development of data collection instruments. The Youth Group Program has three components: (1) A survey to determine the knowledge and attitudes of 1,200 vocational youth club members concerning stereotyping; (2) A pilot program to test the MOVE materials on students at a week-long summer Youth Club Leadership Camp; (3) The development, dissemination, and evaluation of an Activity Kit on changing sex roles and eliminating stereotyping, called the "Expanding Roles Kit." The latter contains activities and information on four topics and can be used in parts or as a total program, by adult and student youth club leaders. The topics covered are:

- How Does Stereotyping Limit People?
- How are Family and Work Roles Expanding?
- Do You Know Your Rights?
- What is Sexism?

A filmstrip, "Expanding Roles for a Changing World," and a cassette tape, "Youth Speaks Out," were developed to introduce the issues covered by the activities in the kit.

Several data collection instruments have been developed to assess attitudes and knowledge about sex discrimination, bias, and stereotyping. These include: "What Do You Feel?," a questionnaire that examines attitudes toward changing work roles and home responsibilities for males and females; a Labor and Family True/False Quiz; a test to sample knowledge about changes in the labor force and family; and the Student Checklist, a 25-item questionnaire developed to obtain students' perceptions about stereotypical behaviors observed in their vocational teachers.

Community involvement and support. This is occurring in a number of ways. Field trips have been held for students to observe nontraditional workers on the job. In the Rochester area, for example, women working in highly skilled technical jobs are visited by high school girls interested in math and science-related careers. An open house for parents in a rural area was held so that they could learn about nontraditional career opportunities. Parents and employers also are involved as volunteer leaders for many of the vocational youth clubs.

Cost and Funding Sources

Project MOVE operates basically on Vocational Educational Act funds awarded by the State Division of Occupational and Adult Education and funneled through the Sex Equity Coordinator. Most of the present year's $140,000 budget will be used to pay tuition for the 190 participants who complete the graduate courses. A vocational teacher educator conference to be held in 1979 will be financed by part of the budget also. In addition, the funds are used to pay staff salaries and part of the Director's salary. Materials development, the purchase of films, filmstrips, tapes, and other teaching and resource materials, and travel expenses are also covered by the budget. The university contributes office space, and some of the equipment used by the project. Graduate students who serve as part-time teaching assistants have been an added contribution of the university.

PROGRAM EFFECTIVENESS

Often vocational educators evaluate programs by looking at the number of students who enroll in and complete skills training and are then placed in jobs. MOVE cannot use this approach, although some changes are occurring in enrollment patterns at schools where teams have taken the graduate courses. For example, one BOCES team reported an increase of seven students enrolled in nontraditional courses, including females in auto body, auto mechanics, building maintenance, and machine shop, and males in cosmetology.

Evaluation is emphasized in learning packet activities, and evaluation methodologies are used by program staff and taught to participants. This technique allows course participants to apply such methods at their own schools. For example, as a part of the learning packets, data are collected that include a preassessment of participants' attitudes, knowledge, and behaviors related to sex stereotyping. The participants, in turn, collect the same data from students or faculty in their schools or districts. Results show that course completers tend to have higher scores on all measures when compared to non-participating teachers.

Another form of course evaluation involves counting the number of contacts reported by course participants when they return to their own school. Contacts include teachers, administrators, students, and others with whom participants discuss the course topics, share materials, or carry out activities. Contact figures are tabulated from the logs kept by participants. A total of almost 5,000 contacts were reported over the first five months of the course with the Ithaca and Auburn groups.

A follow-up evaluation four to five months after completion of the course is conducted each time the course is taught. The evaluation form asks specifically about the outcomes of the participants' projects and generally about the observed changes in the school, faculty, administration, and students. Participants are also required to submit a Project Status Report outlining steps taken to achieve each objective and reporting evidence on the success of the final project.

The concept of team building is crucial to creating a supportive atmosphere within districts and schools. Class members, therefore, work toward developing group cohesiveness and leadership skills throughout the two semesters. A group-growth evaluation form is administered near the beginning and the end of the course to assess group members' perceptions and to measure the amount of change. A final course evaluation form is also administered, with participants being asked to respond to open-ended questions such as "the best part of this course was...," "the worst part was...," and to 23 Likert type items about course objectives, outcomes, assignments, and so on. The average for the responses from the Ithaca and Auburn groups for the Likert-type items was 3.9 on a 5-point scale.

Reactions to the Project MOVE courses have been illuminating. A business teacher at one school said, "We notice a difference at faculty meetings and even in the teachers' room. At least their awareness level has changed and they don't use sexist language in front of us, anyway." An Industrial Arts teacher at that school is now actively recruiting eighth grade girls from the junior high feeder school to enroll in his ninth grade shop classes. Although significant changes in enrollment figures will take time, class members agreed that Project MOVE does "get at the teachers who actually have day-to-day contact with students. This makes the difference!"

PROGRAM FUTURE

The continuing need for MOVE seems evident, as the program reaches out to more and more of the state's vocational educators and students. Certain guiding principles will continue to apply as established efforts continue and innovations are tried. These include:

- The dedication and energy of an experienced and knowledgeable Director
- The commitment of male and female staff teams encouraged to grow as individuals and as professionals
- The development of materials and methods that allow for change and adaptability

- The supportive climate for building action-oriented teams of participants
- The advocacy and support of state and district level administration

The school teams are key to the idea of a spreading network of influence, through the individuals' support of each other and through their in-service workshops for other faculty. One BOCES school provided an example of how the effects of the team approach are felt within a school. Both the female counselor and the male machine shop teacher had been MOVE participants. The counselor described her active recruitment of girls to enroll in nontraditional training, especially "putting students with teachers who are receptive and aware." The two girls in machine shop at that BOCES were there as a result of the counselor's efforts. But equally important was her choice of the shop teacher, who said, "I'm glad I had the course before I got the girls in the class. It really helped me in my treatment of them, being the same to all my students." Interviews with the two girls verified the counselor-teacher connection. One student said, "She knew I liked math and liked to work with my hands, so she encouraged me." The other student added, "He's very helpful, and enjoys having girls in the class. But he treats us equally with the boys."

A major future modification of the project will be to enroll more administrators in the MOVE courses. This may entail making some of the materials less teacher and counselor oriented, but the commitment of administrators is vital if change is to take place.

Plans for a six-day working conference in June 1979 are being made for teacher educators from the State University and City University systems of New York (SUNY and CUNY), and from private higher education institutions in the state. The conference is intended to provide teacher trainers with the materials, skills, and knowledge to offer programs and classes to undergraduate and graduate college students, using the MOVE model, materials, and approach.

Because Project MOVE has grown more rapidly than originally planned, and the demands for its courses exceed what the core staff can handle,

expansion to other training institutions is a hoped for outgrowth of the conference. This would entail adapting the program to suit the new institution and its students. Another desired outcome is the generating of projects by participants, just as projects have been a valuable result of the courses offered by MOVE.

REPLICATING THE PROGRAM

School districts, state education agencies, teacher training institutions, and youth group leaders across the country have already shown an interest in Project MOVE materials and methods. The program has been well documented and the materials, instruments, and resources are adaptable and comprehensive. It is possible for a prospective adaptor to pick and choose from a "menu" of assorted packages and to tailor a program for a specific purpose. For example, a small rural school district could decide to provide a series of inservice sessions that focus on identifying sexism in the media. An in-school team, with the help of the implementation guide, could then select Learning Packets Number 6, Sexism in Textbooks, and Number 7, Critiquing Media and Tests to use with the rest of the faculty.

Project MOVE has already been tried with urban, suburban, and rural groups, and at four sites beyond the original four. It could theoretically be applied in a wide variety of settings with differing target audiences. One issue of particular and immediate concern to vocational educators is training handicapped students. Learning packets would need some revision to meet this population's needs, of course, but the approaches to research methodology, evaluation, and leadership skills could remain almost unchanged.

CONTACT PERSON AND ADDRESS OF PROGRAM

Dr. Charlotte J. Farris
Department of Community Service Education
Cornell University
Ithaca, New York 14853

ELI WHITNEY VOCATIONAL HIGH SCHOOL

Brooklyn, New York

"One girl may be all that graduated in cabinet making last year. But what happened to the 35 boys in that program is a very significant thing. They gained respect for her and came to realize a woman could build cabinets just as well as a man. Their whole tone changed. It was the kind of conditioning needed if we are to equalize opportunities for the sexes in the future."

A Staff Member

PROGRAM OVERVIEW

Prior to 1973, Eli Whitney Vocational High School taught boys how to repair appliances, build cabinets, and upholster furniture, and prepared girls for jobs in cosmetology, fashion, nursing, and business. In that year, the Principal of the school decided that freshmen students at the high school should be exposed to all of the high school's vocational programs, regardless of sex. Thus, instead of exposing each boy and girl, over the course of the year, to the four or five programs traditional to his or her sex, he cut the length of the introductory classes in half, and had all freshmen take all of them. In addition to learning about vocational areas which were traditional to their sex, boys learned about cosmetology, fashion, and trade dress making, while girls learned about upholstery, T.V. repair, and cabinet making.

Not everyone favored the change. A small group of parents provided vociferous opposition. Some students reacted with embarrassment and expressed a feeling of silliness about the classes not traditional for their sex. But the principal persisted. Inasmuch as all the students were in the same position, they could share their uneasiness, and they went along with the program.

Gradually a change in attitude began to take place. Boys began to realize there was no reason why girls couldn't fix business machines or

build ottomans. Girls awakened to the fact that boys were perfectly capable of sewing dresses and styling hair. Boys and girls began to sit next to each other in the cafeteria, and talk to each other about serious, class-related matters. More attention was paid by both sexes to personal appearance. Absenteeism and tardiness declined. Courtesy and respect increased, both among students and staff. By 1978, girls were graduating from programs that only boys had gone through previously. Several were given union cards on graduation, and began to work in fields where no women graduates had worked before. The change had cost nothing, had required no new staff, and had involved no governmental funding or other outside help of any kind.

PROGRAM BACKGROUND AND DEVELOPMENT

Eli Whitney Vocational High School is located in the Greenpoint section of Brooklyn, New York. The school is the center of much community activity, and students take pride in its appearance. There are no graffiti on the walls or litter on the floors. The students say that there is no violence.

The program began essentially in the mind of the Principal. He became principal of Eli Whitney in 1971. In 1972 he opened up all programs to all students, regardless of sex. However, the boys and girls, because of social pressure or learned stereotypes, continued to sign up for courses only in traditional areas. So in the fall of 1973, the Principal decided to require both boys and girls to take exploratory classes in all eight of the school's vocational programs. The assumption behind this was that when students reach the tenth grade, they would then be better prepared to choose a career on the basis of interest and aptitude, rather than on the basis of sex stereotypes. And since all students would have to take the exploratory courses, social pressure would not be a problem.

The only change required to effect the program was cutting the length of each freshman vocational introductory class in half, so that a student would have time during the year to be exposed to all eight classes, instead of the traditional four. Each teacher then saw twice as many groups, each for half as long. The Principal met with teachers in advance to explain the program and work out schedules. Parents were introduced to the program

through an orientation program early in the fall, and this has been repeated each year. Students also were introduced to the program through an orientation program.

PROGRAM DESCRIPTION

Target Population

Eli Whitney draws students from all over New York City. During the 1978-79 school year there are approximately 2,300 students in all. Eighty percent of them are minority students, primarily blacks and Puerto Ricans. They applied to this high school as eighth graders. Students from the five boroughs of New York City apply to vocational schools throughout the city. Applications are processed by the Central Board of Education. They try to distribute the students among the vocational schools so that there is an academic ability and geographic mix. Over 1,000 are turned away each year from Eli Whitney because of lack of space. Most who attend are here because they want to learn a trade, a skill which will enable them to find a job when they leave high school. They nevertheless must complete a full academic program, in addition to their vocational training. This includes English, social studies, math, science, and humanities. A few even change their minds and go on to an academic college program when they graduate. The principal estimates that about half go on for additional schooling of some sort.

Program Staff

The high school's vocational staff of approximately 60 teachers (there are also approximately 45 academic teachers) has a different kind of background than many high school teachers. In accordance with New York State requirements, all of the vocational teachers have worked in the fields in which they teach, for a minimum of seven years each. They have also studied teaching, having completed at least 30 hours of educational courses. A few teach in fields not traditional for their sex. Two of the cosmetology teachers, for example, are male. But the requirement of seven years shop experience in the teaching field has made it difficult to find men and women qualified to teach courses traditionally dominated by the opposite sex.

Program Facilities

No change in the high school's facilities were required to accommodate the program. The various vocational education programs have much of the equipment required for work in their fields, and rather than limiting its use to one sex or the other, it was simply made available to both sexes equally. This required some small adjustments. Girls had to wear closed-toe shoes in the "boys" shops, when previously in the traditionally female courses, they could wear whatever type shoes they desired. More materials had to be supplied for certain of the introductory projects, since all students were involved in these rather than half. But essentially the program facilities were exactly the ones required when the programs were segregated by sex.

Program Activities

Instructional program. The program activities consist simply of the "exploratory shops" offered to ninth grade students. Students learn about the exploratory shop program at the time of their freshman orientation. At the orientation they are welcomed to Eli Whitney and introduced to the school's general procedures and policies. All students are given an orientation handbook which is illustrated with cartoons. In an attempt to diffuse any discomfort students may have about the exploratory shops, one cartoon depicts Charlie Brown saying, "Boy, I hope those girls don't bother me when I start my cosmetology class."

The exact number of exploratory shops has varied slightly from year to year with changes in teaching staff and programs that are offered. For the 1978-79 academic year, ten such exploratory shops were being offered, of which students take eight. The offerings are in:

Health Careers	Electrical Installation
Fashion Careers	Cosmetology
Upholstery	Appliance Repair
Radio, T.V., Electronics	Business Machine Repair
Business Education	Cabinet Making

Each freshman student is assigned to each of the exploratory shops as part of a rotating schedule throughout the year. Each such shop lasts

approximately one month, with the beginning of each new cycle occuring as follows:

Cycle	Beginning Date
1	September 11
2	October 13
3	November 14
4	December 14
5	February 1
6	March 8
7	April 9
8	May 16

Two sections of each exploratory shop are offered in each cycle, so that the approximately 550 freshmen students are divided into 16 classes, each about 35 students in size. The exploratory shops meet five days a week for two 43-minute class periods.

The content of the exploratory shops includes basic skills, safety information, and discussions of opportunities in the field. Of primary importance is that the student have an actual hands-on experience in the field. In the Business Machine Repair exploratory shop, for example, the first two weeks are devoted to a detailed explanation of the parts and functioning of a typewriter, including the technical terminology. Weeks three and four are given to dismantling the machine, and include functional tests. The fifth week provides an introduction to adding machines, and includes a safety test.

Where possible, students work on projects that are of practical use to them. For example, in the appliance repair shop students can bring in from their homes small appliances such as hair dryers or toasters which may need repair. In the upholstery shop, students work on small pieces of furniture, such as footstools, which they can take home and keep. In cabinet making, all students make a small bookshelf.

Each instructor is allowed to plan his or her own course and include the features that seem most important. The general guidelines are to cover the advantages and disadvantages of the trade, available jobs and salaries, and advancement possibilities. An overview of the history of the trade is also provided. Hands-on experience with basic skills which have general applicability are included. In general, information is provided that would be useful to the student in making the decision about which vocational program to pursue through the remaining years of high school. By having students make this decision after actual exposure to the field, the program aims to enable students to choose on the basis of interest and ability rather than on stereotypes. All students must make such a vocational choice at the end of their freshman year. They are, however, allowed to change programs later in their high school program if they have a strong desire and there is room in the program they wish to enter.

Community involvement and support. Once a year, beginning in the spring of 1976, Eli Whitney hosts what is called Industry Day. Members of the business community come to the high school and have a chance to see the students in their "working" environment display their skills. A fashion show allows boys and girls to show off the clothing apparel they have designed and sewn to clothing manufacturers and retailers. Woodworking corporations and business machine companies also send representatives. About 200 potential employers usually attend these Industry Days. All are served a buffet and allowed to observe and talk with students.

To help these potential future employers of the school's graduates find their way to the programs of interest to them, a directory is prepared. This lists where and when each of the classes is taught. It also provides much information about the school which might be of interest to employers. This includes brief descriptions of the various vocational programs as well as information about the school's various academic departments. Employers often express surprise at the wide variety of cultural experiences offered students, including a band and chorus, a drama club, an art club, a photography club, and an annual trip to the Stratford Shakespeare Festival. The directory also describes the many sports programs, the Honor Society, the tutoring program, the Latin Culture and Martin Luther King Afro-American Clubs, and the student government.

The Industry Day generally results in a number of seniors being placed directly in jobs upon their graduation. Graduates in upholstery are aided in their job search by receiving union cards after completing the school's program, which allows them to skip the usual apprenticeship period. Also aiding in the job placement program is the presence on campus twice a week of a New York State Employment Counselor. This is of particular help to youth who need part-time jobs to stay in school. There is also a cooperative education program for the students that allows them direct work experience while still in high school.

In addition to the Industry Day and the other job development efforts at Eli Whitney, there is a School Advisory Board, made up of community employers. Its role is to ease the students' transition to work by making sure the vocational programs stay abreast of practices in industry, and by helping to provide supplies and equipment to the school when needed. The current board at Eli Whitney has been very supportive of the attempts to eliminate the traditional sex stereotyping, and its president feels that the program is the primary contributor to the positive climate at the school. There is also a school Parent's Association, which provides advice to the school's administrators from the parents' perspective.

PROGRAM EFFECTIVENESS

Much of what has changed at Eli Whitney involves new attitudes that boys and girls have toward each other, and that teachers have toward both. Thus far, only a few students have signed up for nontraditional vocational programs for their tenth through twelfth years. But even these few represent progress. The number of boys and girls signed up in each of the school's programs is summarized in Table 1 on the following page. This table also lists the 1978 graduates by sex for each of these programs. The percent of students across this four-year segment enrolled in nontraditional areas is indicated in the right hand column.

As the table indicates, the number of students in nontraditional programs is not large. But six years ago there were none. And the essential

Table 1

Enrollment, by Sex, in Vocational Programs at Eli Whitney Vocational High School, 1978-79 Academic Year

Trades	Sophomores		Juniors		Seniors		1978 Graduates		Percent Nontraditional
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Appliance Repair	29	1	39	0	28	0	13	1	7%
Business Machine Repair	-	-	6	0	12	0	14	1	3%
Cabinet-Making	52	1	29	4	32	0	32	1	4%
Cosmetology	1	36	0	105	1	82	1	57	1%
Fashion Careers	-	-	0	59	1	21	0	26	1%
T.V. Repair	34	5	17	5	31	0	13	0	10%
Upholstery	34	5	17	5	5	1	-	-	16%
Business Education	10	200	20	180	14	130	5	130	7%
Health Careers	4	81	3	87	0	87	0	33	2%
Electrical Installation	68	2	42	1	31	0	28	0	2%

point is not that all students choose nontraditional paths, but that they have a free choice in the matter unencumbered by sex stereotypes and unfair social pressure. There are many informal indicators that show considerable progress is being made toward this goal at Eli Whitney. Many of these indicators were touched on in the "Program Overview." The attitudes of boys and girls toward each other have changed. They now sit together in the cafeteria, and talk about serious class-related topics. Teachers attitudes also have changed; several teachers who described themselves as former "hard liners" said that they have had to admit that girls can do well in "boys" fields and vice versa. A male business machine repair teacher said, "This program is an excellent opportunity for kids to find out what they want to do. There are no problems in having boys and girls in the course. The girls do very, very well and all the kids are a real pleasure."

Another way of looking at this program's effectiveness is in terms of costs. The program involves no additional cost. It requires no outside funds, no special facilities, and no extra personnel. It simply involves a scheduling change which requires all boys and girls to be exposed to all vocational programs. Thus, from a cost effectiveness point of view, if the program accomplishes anything at all, it is being highly successful.

Brief conversations with students also point out the program's success. One male student majoring in cabinet making was asked how he liked having a girl in his class. He said he was skeptical at first, but she showed she could handle it. The boys teased her some, but the same way they would each other. He felt she was very good at cabinet making. A female student majoring in upholstery was very proud of the things she had made. She had never even considered going into upholstery before the exploratory workshop. When she entered Eli Whitney she thought she would major in business. But the upholstery exploratory shop really interested her. She was encouraged by the money she could earn in the upholstery field and also was excited that her teacher was going to help her find a job.

Students in the exploratory program were equally enthusiastic. Their comments included, "It's a great idea;" "It really helps you find out what you want to do;" "Nobody thinks it's funny because we all do it." The only negative comment heard was that the exploratory shops were too short--"You just get really interested and then it's time to move on." The feeling of the students and staff was that having boys and girls together in all the programs was "no big deal." That may be the best indicator of progress of all.

PROGRAM FUTURE

According to all involved with the program, it will definitely continue at Eli Whitney Vocational High School. Although the numbers of nontraditional graduates are on the increase, the staff would like to see more. However, they are not discouraged in the least. They point out that the project is expanding opportunities, and that traditional students are also being positively affected by the presence of their nontraditional peers.

REPLICATING THE PROGRAM

An attractive feature of this program is the ease with which it can be replicated. No additional facilities or staff are required. Its essential ingredients are short-term courses which provide hands-on experience and basic information about various training options, including job opportunities in these training areas. The program then involves scheduling all students through the series of courses.

The orientation of students, staff, and parents to such a program was felt to be important to its success. Parents are encouraged to attend the orientation session with the students, a simple technique that allows questions or doubts about the program to be cleared up beforehand. In addition, potential replicators might consider strengthening their own exploratory programs with an Industry Day similar to Eli Whitney's. Thus employers in the community are also exposed to future nontraditional employees.

The staff at Eli Whitney feels it learned that simply opening up vocational training areas to both sexes will not truly open up opportunities for students. Students must have some experience on which to base a training choice, and a program which provides hands-on exposure to both males and females in all available training programs provides this experience.

CONTACT PERSON AND ADDRESS OF PROGRAM

Nathan Mayron, Principal
Eli Whitney Vocational High School
257 North 6th Street
Brooklyn, New York 11211

NEW PIONEERS

Raleigh, North Carolina

"Last year I had only two guys in my family life (home economics) classes. I really wanted to have a lot more boys. A male student from last year did some promotion for me to help get more boys into the class. He made up posters and got on the school P.A. system and said things like, 'Rosy Grier crochets and does needlepoint, how about you?' Also, the Art Department made a picture of a pregnant male that I hung on my classroom door. The idea was to raise issues about Teenage pregnancies for discussion in The Family Life classes, and to see if they (the males) would have different attitudes about responsibility for pregnancy if they were the ones who got pregnant. The promotional efforts worked. This year I have 40 boys in my family life classes. One of them is 6'6" and a star basketball player. He ran for and was elected Vice President of the county branch of Future Homemakers of America."

Family Life Teacher

PROGRAM OVERVIEW

The major purpose of New Pioneers was to develop and implement a model for eliminating sex stereotyping in North Carolina's education system. A small staff was hired and housed at the state education building in Raleigh. It became the spearhead for a statewide effort to examine sex bias in first vocational, and later, academic programs in the state. A series of workshops was held to train both state agency representatives and local education agency principals and teachers, sensitizing them to sex bias in educational programs, and mapping out ways to overcome this bias. The results, while hard to measure objectively, are reflected in the increasing numbers of both girls and boys enrolling in nontraditional vocational courses throughout the state, and in the increased awareness of sex equity issues shown by teachers, and LEA and SEA staff members, following the inservice training these individuals experienced.

The New Pioneers program went through two funding phases. For the first two years (June 1974 through September 1976), it was supported with Vocational Education, Part C monies, and program efforts were focused on

expanding sex roles in vocational education. For the second two years (October 1976 through October 1978), the program was supported with Women's Education Equity Act (WEEA) monies, and program efforts were expanded to include elementary and secondary education. The New Pioneers Project Director felt that awareness of sex equity issues was needed in all areas of education and that program efforts should address the problem in both vocational and academic education.

At the state level staff members in each of the occupational areas in which vocational instruction is offered developed their own plan to eliminate sex stereotyping through staff inservice programs. A slide presentation was developed and presented at statewide conferences for teachers and at regional workshops for district and local personnel. A Summer Institute was begun, a week-long workshop for LEA Directors who were concerned about sex bias and interested in making changes in their vocational programs. Participants trained at such workshops then conducted local workshops for the teachers in their own districts and schools. Participants trained at both the Summer Institutes and at the local workshops received credit toward their teaching certificate renewal. As of spring 1978, more than 75 workshops had been held, directly reaching over 3,500 teachers. In addition to the slide presentation, a variety of printed products were produced, including an annotated bibliography, several journal articles, and a training course with a Seminar Leader's Handbook.

PROGRAM BACKGROUND AND DEVELOPMENT

Background

In 1972, the Occupational Research Unit of the North Carolina Department of Public Instruction wrote a proposal entitled "Women in the World of Work," and submitted it for Vocational Education funding. The proposal was inspired by the increasing number of women entering the work force, by widespread research showing that women tended to work in low paying jobs, and by the passage of the 1972 Education Amendments, of which Title IX prohibited discrimination on the grounds of sex.

In 1972, enrollment statistics showed that North Carolina followed the same pattern seen throughout the country: 61 Occupational Education courses had over 90% male enrollment, 19 had over 90% female enrollment, and only 68 were mixed. Furthermore, the single-sex classes contained 90% of the students. In July 1974, when the New Pioneers Project actually began, the figures were essentially unchanged.

The original objectives of the program were (a) to develop a model for eliminating barriers to occupational training for women, and (b) to assess employers' attitudes and identify other employment barriers that would limit women's opportunities. In 1974 these objectives were changed in several ways. First, because the project as finally implemented had a smaller staff than originally projected, it was necessary to reduce its scope. A decision was made to drop the objectives relating to employment barriers, largely because Local Directors of Occupational Education felt these were a less immediate problem than the attitudes of teachers and students. It was therefore decided to focus entirely on the Occupational Education programs themselves.

Second, the objectives of the project were broadened to include occupational restrictions placed on boys and men. According to project documents, there had been widespread opposition to a project aimed only at females. Further, the project staff felt it would be impossible to eliminate stereotypes about women without also understanding and eliminating stereotypes about men.

Third, in spite of the small size of the staff, the group decided to stick to the original plan of making the project a statewide effort. The rationale for this decision was:

- An across-the-board effort should allow everyone to take advantage of a changing system.
- Those who were not yet ready to change might need more time than the project had to give. It was felt that it was better to set mechanisms in motion that would continue than to begin narrow, intensive efforts that might not get built into the system.

- The agency itself, though oriented more toward service than regulation or supervision, does have a great deal of leverage. With the support of the state's top administration, a small staff and a small budget should allow genuine impact. Therefore, one of the central questions of the project became: How can we use the system to reform the system?

The three original expected products were a position paper on the status of women in occupational education and in the labor force in North Carolina, a strategic model for change in the educational system, and an inservice program to implement this model. Here, too, some changes were made. According to project documents, two publications* appeared in North Carolina during the early months of the project which forcefully presented the status of women in the labor and education worlds of North Carolina. This seemed to fulfill the first objective. Thus it was decided to concentrate on the strategic model for change and the inservice program.

PROGRAM DESCRIPTION

Target Population

At the broadest level the target population for the New Pioneers project included everyone in the state of North Carolina. The focus of most project activities, however, were on: state educational agency (SEA) staff; local directors of occupational education, and through them, local educational agency (LEA) staff; and to some extent concerned and interested community groups.

According to project documents, it was learned early that the various SEA programs and personnel had different needs regarding the elimination of sex bias. Some occupational areas, for example, needed to attract more female students while others needed to attract more male students. Conse-

---

* ELIMINATING SEX DISCRIMINATION IN SCHOOLS: A SOURCEBOOK. Raleigh, North Carolina: Department of Public Instruction, 1975.

THE STATUS OF WOMEN IN NORTH CAROLINA, 1974. Raleigh, North Carolina: North Carolina Commission on the Education and Employment of Women.

quently, each program area needed to develop its own plan to eliminate sex bias.

Program Staff

For the first two years, 1974 to 1976, the New Pioneers staff consisted of the Project Director and a full-time secretary. They were housed administratively within the state education Division of Vocational Education. The Project Director brought impressive credentials with her, including an M.A. in teaching and Political Science and experience in various political and women's activist organizations.

The Project Director felt that the position of Project Secretary was especially important. Since staff would spend much of their time in the field with speaking engagements and workshops, the Project Secretary would often be the only one in the office to respond to telephone calls and visitors. For this reason, the Project Director felt it was an especially demanding position, and consequently gave secretaries the same training that was given to other staff.

Two new staff (Specialists) joined the project in the fall of 1976. One was a male with vocational education teaching experience and the other was a female with experience in career counseling at North Carolina State University. The Project Director felt it was important to have staff who could work successfully with a wide spectrum of people. Three essential qualifications for the new staff were: public speaking ability, the ability to relate well to others, and a willingness to immerse themselves in the philosophy of the project. Much of the Specialists' project work involved planning and conducting workshops and Summer Institutes and speaking to educators and community groups. A third Specialist joined the project in the fall of 1977.

Program Activities

New Pioneers is essentially a training and dissemination project. Presentations, workshops, and summer institutes were developed along with supporting materials to teach people what is meant by sex bias, how to recognize it, and what to do about it. Although project activities focused

primarily on administrators and educators at both the state and local levels, the hoped for impact clearly extended down to students and the community. There were five basic components to the New Pioneers Project: work with SEA staff, work with LEA staff, work with teacher educators, work with community groups, and work with student attitudes.

The latter two components were generally done informally. The Project Director worked with students when teachers asked, and with community groups such as Girl Scouts and church groups on a request basis. During the second two years, after the project staff had increased, such efforts increased somewhat. Community groups, however, tended to take a passive rather than an active role. They invited project staff to give presentations, but rarely got actively involved in related activities. The first three components mentioned above will be discussed at more length.

Work with SEA staff. In August 1974, the New Pioneers' efforts began with two memos to all state staff, one on strategies for opening up all programs to all students, and the other on non-sexist language. According to the Project Director, she realized as she met with each program's staff that their situations were very different. The same strategies were not going to work for everyone. Consequently, each program was asked to develop its own plan to eliminate sex bias. Plans, however, were generally not written. It became apparent that "people did not understand the problem, did not share the goal and wanted no part of anything that looked like an artificial quotas game." According to the Project Director, a real breakthrough did not come until February 1975 when the New Pioneers staff were given two hours at a full division meeting. In the words of the Project Director,

> The topic was not legal compliance, but rather the sociology of sex bias: What is sex bias? How do you know it when you see it? What does it do to children, psychologically and professionally? And only then, what do you do about it?

The Project Director felt that this meeting represented a major turning point because staff began to realize that sex bias was not just a phrase written in a law, but represented real problems which they never before understood. Following this meeting the plans began to be written.

Other New Pioneers' activities designed to eliminate sex bias working through state staff included the following:

- In the spring of 1975, staff developed a filmstrip entitled, "I'm Glad I'm a She, I'm Glad I'm a He," and field tested it with individual state staff members.
- In the summer of 1975, staff participated in programs for Home Economics, Health Occupations, Business and Office Education, and Occupational Exploration at the annual statewide conference for teachers.
- Throughout the first year, staff cooperated with each program area by speaking at Future Homemakers of America rallies, writing articles for newspapers, meeting with the Office Education Advisory Council, speaking to Delta Kappa Gamma Chapters, and doing whatever else was needed.
- During the winter of 75-76, New Pioneers asked each program to update its sex bias plan. Some programs had begun to include parts of this plan in the federally required state plan for Vocational Education.
- During January of 1976, staff members participated in the Staff Development Conference.
- During the spring of 1976, field work was continued.
- During the summer of 1976, staff participated in the Summer Conference in programs for Trade and Industrial, Agriculture, and Distributive Education, and Occupational Exploration, and in the preparation of a filmstrip on the special problems of disadvantaged girls prepared by the section on Disadvantaged and Handicapped.

Although New Pioneers staff learned early that each program had different problems that they needed to address in their program plans, there were also many common elements. These were compiled into a list of suggested activities. They included the following topics:

- Collecting Enrollment Statistics
- Providing Staff In-Service Training
- Using Check Lists and Other Management Tools
- Preparing Brochures
- Preparing and Using Instructional Materials

- o Arriving at Course Titles and Descriptions
- o Locating Role Models
- o Increasing Awareness of Teachers
- o Forming Youth Clubs
- o Providing Teacher Education
- o Forming Advisory Councils
- o Disseminating Information in Newsletters and Trade Magazines
- o Meeting Possible Problems and Objectives from Mixing Enrollments.

Most program areas found it simplest to structure activities described in their plans so that objectives (including dates), strategies (including person responsible), and evaluation (expected outcomes) would be clear.

Work with LEA staff. A second major component of the New Pioneers project was comprised of activities focused on the Local Education Agencies. There were four major efforts in this area: (1) getting to know the Local Occupational Education Directors and gaining their support; (2) developing a filmstrip (mentioned previously) for widespread use by Local Directors and others; (3) developing local plans for eliminating sex bias; and (4) conducting inservice training (Summer Institutes) for LEA representatives.

1. The work of getting to know Local Directors was greatly facilitated by the organizational structure of vocational education in the state of North Carolina. Each LEA in the state has an Occupational Education Director or Planner, providing a built-in network for local contact. Further, the Local Directors are accustomed to looking to Raleigh for guidance in preparing an annual plan to be submitted to the federal government as part of the state plan for vocational education. Also, the Local Directors meet monthly in regional meetings, making them easily accessible. The Project Director feels that the existence of this cooperative and easily-accessible network is the reason why New Pioneers has had a wide impact.

In the fall of 1974, the Project Director attended all eight of the regional Local Directors' meetings, explaining the goals of the New Pioneers program, and passing out the same two memos that had been distributed among the state staff. Based on these meetings, it was concluded that three things were needed before the Local Directors could be effective:

- o A method (the filmstrip) by which the Local Directors, independent of the New Pioneers staff, could explain what sex bias is, where it comes from, how you know it when you see it, and how it hurts children.
- o Specific suggestions for local activities to reduce bias.
- o A small group of LEAs that would work with the project to help develop these things before they were taken back to the entire group.

In December 1974, there was a statewide meeting of Local Directors. At this meeting volunteers were solicited to act as pilots for the New Pioneers project. It was explained that they would be helping to establish a model for the rest of the state, and each volunteer was promised two days of consulting from the New Pioneers Director. Seventeen Local Directors volunteered and ten were selected. The involvement of the pilot Local Directors included individual planning sessions, field testing the filmstrip, implementing their plans, sharing their progress with fellow Local Directors, and sending a representative to the Summer Training Institute.

The Project Director felt that the main value of working with the pilot LEAs was in giving the project a place to start. She did not try to complete a full cycle and evaluate results before moving on to the rest of the state, but used the pilots as forerunners. In fact, by the end of the second year of the program, several of the LEAs working on their own had done more than some of the pilots.

2. A second part of New Pioneers work with LEAs consisted of developing a filmstrip and cassette tapes to help Local Directors explain sex bias to their audiences. In December 1974, a slide presentation was commissioned. The slide presentation was field tested primarily at the Local Directors' meetings, at faculty meetings in the pilot units, and at other events like NCAE and School Boards' Association meetings. The slides were

shown and changed many times over a ten-month period. The most serious flaw pointed out by the Local Directors, almost all of whom were male, was that it was biased against men.

The slides were converted to filmstrips with cassette tapes because it was cheaper to produce filmstrips in quantity. About 200 copies of the filmstrip were reproduced for less than $1,000. The filmstrip has subsequently been distributed all over North Carolina, and lent to many places outside the state. Although it was originally designed for use at general faculty meetings, Summer Institute trainees have reported that it has been widely used with students, and occasionally with church and community groups.

3. The third part of the New Pioneers work with LEAs consisted of helping Local Directors prepare sex bias plans. Ten LEAs were selected as pilot sites, and each was given help in this task by the Project Director and her staff. The other Local Directors were also encouraged to develop such a plan, and were told they could call on either the Project Director or the pilot Local Director in their area for help and advice. A rough outline of what a plan might contain was distributed and each of the major areas in it was discussed.

Over the spring and summer of 1975, 83 local plans were turned in, out of the 148 LEAs. Each one was evaluated and returned to the Local Director by way of their Area Director. The following year, the New Pioneers Director met with each Local Director.

No specific activities were required in the local plans for eliminating sex bias. However, the following topics were most often addressed: Enrollment Data; Facilities; Teacher Attitudes (attitude assessment and training); Instructional Materials; Curriculum Development; Student Attitudes; Youth Clubs; Preregistration Procedures (biases in interest inventories, course descriptions and brochures, recruitment efforts, posters, films and other guidance materials, career days, and speakers); Advisory Councils; Job Placement; Parental Objections; and Community Public Relations. The format for the local plans was very similar to the one described earlier for the state plans.

4. The fourth part of the New Pioneers work with LEAs was inservice training. Summer Institutes were conducted every summer beginning in 1975. Later on, planning workshops were added to prepare administrators and others in the LEA to support those they sent to be trained at the Summer Institutes. According to the Project Director, it became clear during the first year that although one- or two-hour sessions were useful to inform teachers of what is meant by sex bias, and to arouse interest, they were not enough to motivate a sustained effort. In the words of the Project Director:

> We needed more time, preferably spread over several weeks. Because an understanding of sex bias may require profound changes in attitudes and assumptions, people need percolation time. They need to hear a little bit, go home and listen to their three-year-old differently, and come back and swap stories. Then hear a little more, go to the classroom and listen to their sixth graders differently, and come back together again.

A second point considered in designing the Inservice Training programs was North Carolina's requirement that teachers must have a certain number of continuing education credits for renewal of their teaching certificates. However, it was clear that the Project Director could not provide inservice for 148 school systems. Consequently, a plan to train teachers who would then go back to their respective LEAs and train others was developed. The project decided to accept nominations from any LEA that was willing to give a course on sex bias in education to other teachers. In this way one person could be trained at the Summer Institute and then in turn would train others at the LEA. It also meant that each LEA would have its own resource person, which gave it control over how the program was conducted. An aid to this plan came when Occupational Staff Development monies were made available to help support the training of teachers.

As an example of how this system worked, one program set up in an LEA reached almost every teacher and aide there. A team of two resource teachers who were trained at the Summer Institutes trained the principal and local teachers from each school, who in turn taught the teachers and aides at their respective schools. The training was given in two-hour blocks once each month for ten months, making a total of 20 hours, which met recertification requirements. The principals and local teachers went to class early

in the month and later in the same month taught at their own schools, so for them there was an investment of 40 hours during the school year. Groundwork was laid for the program in early August before school started. The Project Director feels that this is one reason the program was so successful in this LEA.

As a part of the LEA effort, training materials were developed for Summer Institute participants. This was to let teachers know that everything was down on paper, freeing them from taking notes and allowing them to take part in discussions. At the end of the Summer Institute, participants were expected to turn in a plan of activities that they would carry back home. To help with this, the Seminar Leader's Handbook is a lesson plan and contains a planning guide for how to organize and implement the program. The importance of having detailed training materials for participants to take back to their districts and use is illustrated by some comments made during a recent interview with one teacher who had been taught by a Summer Institute participant:

> I took everything from that class and brought it back and used it in my own classes. The course opened my eyes to behaviors for men and women. It was fun to see how my class would react to the issues raised by the materials.

Another teacher who had been trained by a local teacher at her school commented:

> I have made mimeograph copies of some of the handouts from the sex bias class and used them in my Home Economics I classes. I also showed the filmstrip.

Before the second Summer Institute was conducted (1976), letters of invitation were sent out to the Superintendent, Director of In-Service Education, and Local Director of Occupational Education in LEAs which had not taken part during the first year. It was emphasized that the Institute was not accepting individual participants, just LEA nominations. The nomination form also included a statement to be signed by the Local Superintendent, the Staff Development Coordinator, and the Local Director of Occupational Education declaring that they would support the course. These rigorous requirements for participation and declarations of support insured

more top-level support than had been present the first year. A total of 29 LEAs responded by sending representatives, compared with 46 in the first year. In 1977, 35 participants attended the Summer Institute, and in 1978, 46 did so. In all, 156 people have been trained, representing 115 LEAs.

Work with teacher educators. According to the Project Director, it was important to reach teacher educators with the New Pioneers program, since they were the ones who were shaping the future teachers in the state. In the spring of 1978, New Pioneers staff conducted the first one-day workshops for teacher educators. The focus of these workshops had to be different from the Summer Institutes. This group of people was product oriented. Their professional lives depended on their being able to produce. Awareness sessions lacked drawing power. What did work was to focus workshops on developing curricula that could be used by other educators to eliminate sex bias, and this course was followed.

Other project activities. There were project activities other than those related directly to SEAs, LEAs, and teacher educators. Mostly, they involved disseminating information via speaking engagements, newspaper articles, radio and television appearances, and publications. Speeches were made to school groups, college classes, civic organizations, and community forums. Project staff also wrote several press releases describing the project, providing results of studies of class enrollments, and describing the training institutes. Project staff also appeared on radio and television programs to describe New Pioneers.

New Pioneers' staff also worked directly with students on occasion, gathering feedback about issues related to sex bias. Questionnaires were generally used for this purpose. Teachers were often surprised at how stereotyped many students' views were. This emphasized the need to teach students how sex bias hurts everyone.

Costs and Funding Sources

The level of Vocational Education, Part C funding during the first two years was approximately $40,000 per year. During the first year, an additional $5,000 was made available for staff development funds to cover the

costs of sending teachers to the Summer Institute. The level of WEEA funding for the third year was approximately $115,000 and for the fourth year, approximately $80,000. Some money was carried over from the third to the fourth year, making the total monies available for the two years roughly equal.

PROGRAM EFFECTIVENESS

No formal evaluation of New Pioneers has been conducted. Strategies and materials have been frequently revised to make them more effective. And there is evidence in the form of products, comments from people affected by the project, and enrollment data, to show that New Pioneers achieved success in reducing sex bias in the state of North Carolina.

SEA Activities

In the January 1977 New Pioneers report, the Project Director summarized two years of state level efforts in the following way:

> The strategy within the state agency was to combine individual written plans by each program area, with a steady but not heavy diet of presentations at staff meetings and conferences. After two years, most state consultants seem to feel that the biggest impact of the New Pioneers Program for them has been one of awareness, rather than actual changes in procedures. It is our feeling that they may have changed their procedures and their approach more than they realize. In any case, they are now quick to recognize the stereotypes, and have reached the point where they are outraged when they see stereotypic materials produced by other divisions in the agency. They have accepted that sex stereotyping is a genuine and interesting problem, and when the occasion arises, they do something about it.

LEA Activities

Summer Institute evaluation. At the end of the training week at the Summer Institutes, trainees were asked to write letters telling how they felt about their workshop experiences. In the January 1977 final report, the Project Director summarized the comments as follows:

> They were nearly unanimous in their feeling that they had never worked so hard, but it had been worth it. And they did feel that they were prepared for the task ahead. A typical comment

was, 'I'm tired, but I'm ready.' One of our favorites: 'This workshop will make me a better teacher, a better wife, a better mother, and a better grandmother.'

Comments from the field. Teachers and students who have been affected down the line by the New Pioneers' efforts have reacted in a variety of ways. One teacher who had been trained at the 1975 Summer Institute made the following comments:

> I used to have the boys take the trash out and books to other teachers; now I have boys and girls do it. Other teachers in the school are changing too. Some said they'd never mix boys and girls and now they do. The workshop in Raleigh made me feel I'd teach boys and girls all the same way.

Another teacher who was trained as a lead teacher at her school by a team of Summer Institute participants had the following things to say:

> The whole thing was wonderful. Those that put themselves into it got a lot out of it. It made me change my mind about even seating assignments. Also, I never thought before about how biased the textbooks are--I had my students note it. Students are taking it home too. I got feedback from parents of students on what I was teaching. I used some of the materials in my sociology class--the object was not to get a divorce. My students even tell me when I'm sexually biased.

A male masonry teacher who was trained by a lead teacher (two steps removed from the resource teacher trained at the Summer Institute) made the following comments:

> It's changed some of the things I do. It gave me a different view on my approach to girls and boys and ideas on how to improve--we need to work on job placement to inform contractors that girls are qualified.

Two high school girls had the following things to say when asked why they decided to take bricklaying:

> I got tired of home economics. I might consider it for work. I'd go to technical school after high school if I decide to stay in bricklaying.
>
> The instructor really encouraged me. He said there's a lot of women in bricklaying--it's not just a course for boys.

Enrollment data. At one LEA, where every teacher had attended 20 hours of sex bias training, the Local Director of Vocational Education said they began to see changes in course enrollment patterns at the high school in the fall of 1976. For example, girls enrollment in Introduction to Agriculture classes jumped from 14 out of 103 in 1976-77 to 38 out of 86 in 1977-78. There were increasing numbers of nontraditional students in other classes that had previously been considered traditional for one sex or the other also. The 1977-78 enrollment below illustrates this:

Number of Nontraditional Students	Total Students Enrolled	Course Title
70	189	Introduction to Home Economics
81	185	General Horticulture
15	160	Advanced Home Economics
12	104	Automotive Mechanics I
5	23	Cabinetmaking I
14	68	Health Occupations I

Statewide enrollment figures show some definite trends. After 1974, more girls enrolled in traditionally male programs and more boys enrolled in traditionally female programs. After the first year of New Pioneers nearly 1,000 more girls enrolled in agriculture, 1,300 more boys enrolled in home economics, and 700 more girls enrolled in trade and industrial education. In the second year of the project, enrollments of girls in agriculture rose to over 1,700 and enrollments of boys in home economics rose to over 2,100. There were, however, no significant changes in health occupations and business and office education, two traditionally female programs.

It is hard to say to what extent these changes in enrollment figures can be attributed to the New Pioneers program. Some changes might have

been expected as a result of Title IX legislation and feminist movement influences. However, it is clear that the New Pioneers program reached many teachers throughout the state, some of whom actively sought a more equal mix of students in their classes. It seems fair to conclude that the New Pioneers program has had an impact on enrollment patterns in the state.

Cost effectiveness. When the cost of the New Pioneers program, $40,000 for each of the first two years and $100,000 for each of the last two years, is weighed against the value of the materials and methods that were developed and the number of educators and students that were reached by the program, it would appear to be cost-effective. The project capitalized on its favored status with top-level management and used that support to spread sex equity awareness. It also capitalized on the existing network of Local Directors of Occupational Education within the state to bring its programs to the LEA level.

PROGRAM FUTURE

Possible Improvements

A number of changes have been suggested by program staff, and state and local education agency representatives, for consideration for the future. One of the Local Directors of Occupational Education felt that if he had it to do over he would pay the lead teachers to teach their classes and would give teachers release time to attend the classes. Certain teachers felt that the materials were good, but that more time was needed for discussion in the teacher-conducted classes. One teacher felt that workshops were needed for parents to help break through some of their stereotyped thinking. Another teacher felt that the classes should be held on inservice days or after school rather than at the end of a regular work day. The Project Director felt that if sufficient funds had been available it would have been desirable to conduct telephone follow-ups of trainees that had attended the Planning Workshops. She also commented that it would have been good at the beginning of the period to develop lists of relevant materials that existed in the state, with indications of where they could be borrowed. This was done later in the project. She also felt problems could be avoided

by better scheduling of workshops, and avoiding those days when teachers already have commitments. The State Sex Equity Coordinator commented that the New Pioneers program did more than he could possibly have done by himself. He also supported the idea of at least telephone follow-ups of the planning workshops. And he felt that the non-vocational education divisions, such as science, math, and social studies, should be inserviced by the project along with the occupational education division.

Continuation

New Pioneers, as a separately funded project, has ended. Many of the activities it initiated will be carried on, however. According to the state Sex Equity Coordinator (Secondary Level), present plans call for continuation of the planning workshops and Summer Institutes. Other activities, such as speeches to community groups, will probably be quite limited. Currently, only the Sex Equity Coordinator is available to perform the duties previously performed by the Project Director and three specialists.

The State Assistant Superintendent of Student Services is hopeful that four new human relations people can be added to his staff. Two of these would be assigned sex equity functions and would work in cooperation with New Pioneers activities. Funding is being sought from the state for these positions.

REPLICATING THE PROGRAM

Other states have looked to the New Pioneers project for activities that could be replicated in their states. The Project Director has served as a consultant in both Oregon and North Dakota, helping to set up programs similar to New Pioneers in these states. The filmstrip, "I'm Glad I'm a She, I'm Glad I'm a He," has been adopted for use outside the state.

The fact that many of the project materials and methods were designed to be used by newly trained people increases the probability of a successful replication. Many of the teachers affected by the New Pioneers project were trained by teachers who were trained at the Summer Institutes. This

suggests that the materials and procedures used in the Institutes are transportable.

The Recommendations section of the January 1977 report which describes the first two years of the New Pioneers project outlines in detail how to implement each component of the project activities. It is essentially a cookbook, with anecdotes to explain why a particular strategy or product succeeded or failed, and what was done to correct it.

Two additional publications which have come out of this study are now available. They are:

- The New Pioneers Handbook for State Staff, with sections on working with the State Agency, LEAs and Teacher Educators. This is a companion piece to the handbook on Vocational Education, which was completed in 1976.
- The New Pioneers Seminar Leader's Handbook (known to some as the "Black Book"), is a set of training materials for the 20-hour teacher inservice course.

These documents are available from the Women's Educational Equity Act, c/o Education Development Center, 55 Chapel Street, Newton, MA 02160.

CONTACT PERSON AND ADDRESS

Amanda J. Smith
New Pioneers Project Director, 1974-1978
Cullowhee Spring
Winkler Road, Route 2
Durham, North Carolina 27712

Gary L. Ridout
Sex Equity Coordinator (Secondary Level)
Division of Vocational Education
Department of Public Instruction
Education Building
Raleigh, North Carolina 27611

WORK OPTIONS FOR WOMEN

Raleigh, North Carolina

"Some people say, 'That dirty work! Why do you have to be like a man?' I don't think it changes my identity. I say, 'What are you going to say when I'm making that money?' I'm serious about the future and I intend to have something when I'm through with school."

A Woman Trainee

PROGRAM OVERVIEW

The young woman had just finished another morning class at the construction site used by Wilson Technical Institute. She and the other 14 women in the heavy equipment operation program were meeting back at the school for a group counseling session and classroom training. The class is one of several in nontraditional skilled trades being conducted for women in North Carolina through the Work Options for Women (WOW) program, sponsored by the North Carolina Council on the Status of Women. The first classes started in March 1978 at Anson and Pamlico Technical Institutes and at Southeastern Community College. Since then, two more schools, Wilson Technical Institute and Vance-Granville Community College, have added programs for WOW participants.

The goal of WOW is to improve the economic condition of North Carolina women by opening up vocational opportunities in fields traditionally dominated by men. The program specifically focuses on training unemployed and low-income women in the skilled trades.

A program involves, first, six months of vocational training at a community college or technical institute. During this time, students also receive four hours of classroom work a week, covering subjects related to their vocational field. This period is followed by six months on-the-job training with private employers. Throughout the entire training period participants receive two hours of counseling a week, covering everything

from money and time management to job interview techniques. They also receive a stipend throughout the year.

Almost every woman in the program has faced similar problems of unemployment or underemployment, dependency on welfare payments, lack of marketable skills, and the responsibility for supporting minor children. Many of them had never worked outside the home, or had been employed only at low-paying, unskilled traditional women's jobs. A majority had not completed high school and were subsisting and raising children on poverty-level incomes from various social service agencies.

For these women, Work Options is providing the opportunities to train in job areas that are in demand by local employers, to learn job readiness skills, to receive individual and group counseling, and to obtain support to cover transportation, books, and equipment costs. Extremely important to many of the women is the stipend they receive that will enable them to complete the year-long program and enter the job market as trained workers.

One WOW participant expressed the feelings of many by saying, "Every time I went to the employment office, 50 people were standing there better qualified than me. I'd like to go to apply for a job as a qualified crane operator with a state diploma, and see what they say about my qualifications. I'll be the woman they want!" Placement figures and reactions of those who have completed the program suggest her enthusiasm is well founded.

PROGRAM BACKGROUND AND DEVELOPMENT

The Council on the Status of Women is a state agency that sponsors WOW and acts in an advisory and advocacy capacity to policy makers statewide. In addition, it serves as a resource center and clearinghouse of information for and about women. As a result of its assessment of women's needs in the state, the Council established improving the economic status of women as a major priority. When the Department of Labor made funds available through CETA Title III, the Skill Training Improvement Program (STIP), the Council applied for and received money to train women in nontraditional jobs. The

proposal to establish WOW focused on skilled trades jobs for women because a high school diploma is not required, the training period is short enough to maintain student commitment, the wages are higher than those for most entry-level, traditional women's jobs, and the employment potential is good. In addition, employers provided an impetus to establishing a training program for women in construction and other skilled trades. Their demands for qualified women in nontraditional areas are increasing as a result of recent federal requirements that companies with government contracts of $10,000 or more must employ 3.1 percent females in their work force by May 1979.

Initially, the best approach was thought to be the financing of individuals to train in construction by fitting into established classes at several community colleges. Those plans were changed to encourage class-size groups of women only at a few selected institutions. CETA staff first recommended the change, and the Council agreed, because supportive systems such as counseling and follow-up services would be easier for staff to maintain. An additional and equally important advantage of grouping women students, particularly those in nontraditional training, has been the peer support and sharing of problems.

In two of the succeeding programs, however, students have been included in the regular curriculum. WOW staff, in those two instances, located existing programs that met employers' needs for workers in specific fields. Women were then recruited and enrolled in mixed classes with males and females. This approach cost less than the class-size projects, and gave women an opportunity to work with men before their placement in on-the-job training. Both approaches are being used currently, and WOW will evaluate which is better when the training is completed.

Prior to the funding of the program, the Project Coordinator had worked closely with the State Employment Security Commission and the Department of Labor gathering information on actual and projected employment figures by regions of the state. She also examined the existing vocational programs offered by the community colleges and technical institutes, and surveyed employers' needs. All the information was used to select schools

best suited to serve WOW participants and assure training in fields where employers had construction jobs for women. The original three institutions have now expanded to five, offering programs in carpentry, brick masonry, welding, heavy equipment operation, and electrical installation.

During the first months of the program, in the spring of 1978, recruiting students and establishing the programs in the community colleges were of primary importance. Since then, job development and working with employers have become central tasks. Program planning and development have also evolved since WOW's inception. Requests are being received from community colleges and from potential employers for programs in other skilled trades and for expansion to other areas of the state.

When such requests come from employers, the response by WOW is to look at pay scales and types of jobs women could expect from a company, the potential for promotion, and the reasons the employer wants to hire women. If these factors look positive, two courses are possible. If the employer prefers to train the women, WOW simply recruits and screens applicants. Should employers prefer to have potential employees trained by the community colleges, WOW then arranges a meeting between the employer and college. At that time, before any recruiting efforts are launched, employer expectations, college curriculum, and the required teaching and counseling staff are discussed and decided upon.

When a new program request originates at a community college, staff from WOW first check with the regional employment office and with employers in the area to determine the actual job possibilities for women. If they are good, negotiations are held with the college to determine the best program and curriculum to be offered. This approach has reduced the painful experience of training women for jobs that don't exist.

The reaction to women working in construction jobs has been interesting. The WOW programs are located in rural areas where conservative attitudes often exist toward women in nontraditional work--in the schools, the community, the employers, and among women themselves. A young woman who was in the on-the-job training period as a carpenter said, "Our class at Anson

was the first all-woman carpentry class. When we were building the first house, people in the community were really shocked. They used to come around just to look at us!" It is not surprising that some initial reluctance to nontraditional training was encountered. But, with each succeeding recruitment and publicity endeavor, and with each group that completes its classroom training, attitudes are being changed.

The organization and staffing chart (Figure 1) reflects the comprehensive set of services provided to program participants. Overall program administration responsibility resides with the Executive Director of the Council; in practice the Program Coordinator has full responsibility for managing WOW and for making it work on a daily basis. The Executive Director of the Council stated, "We're not interested in long-term sponsorship of programs; our role is to act as a catalyst for model programs or demonstration projects that can go on their own or under other agencies, community colleges, or private industries."

PROGRAM DESCRIPTION

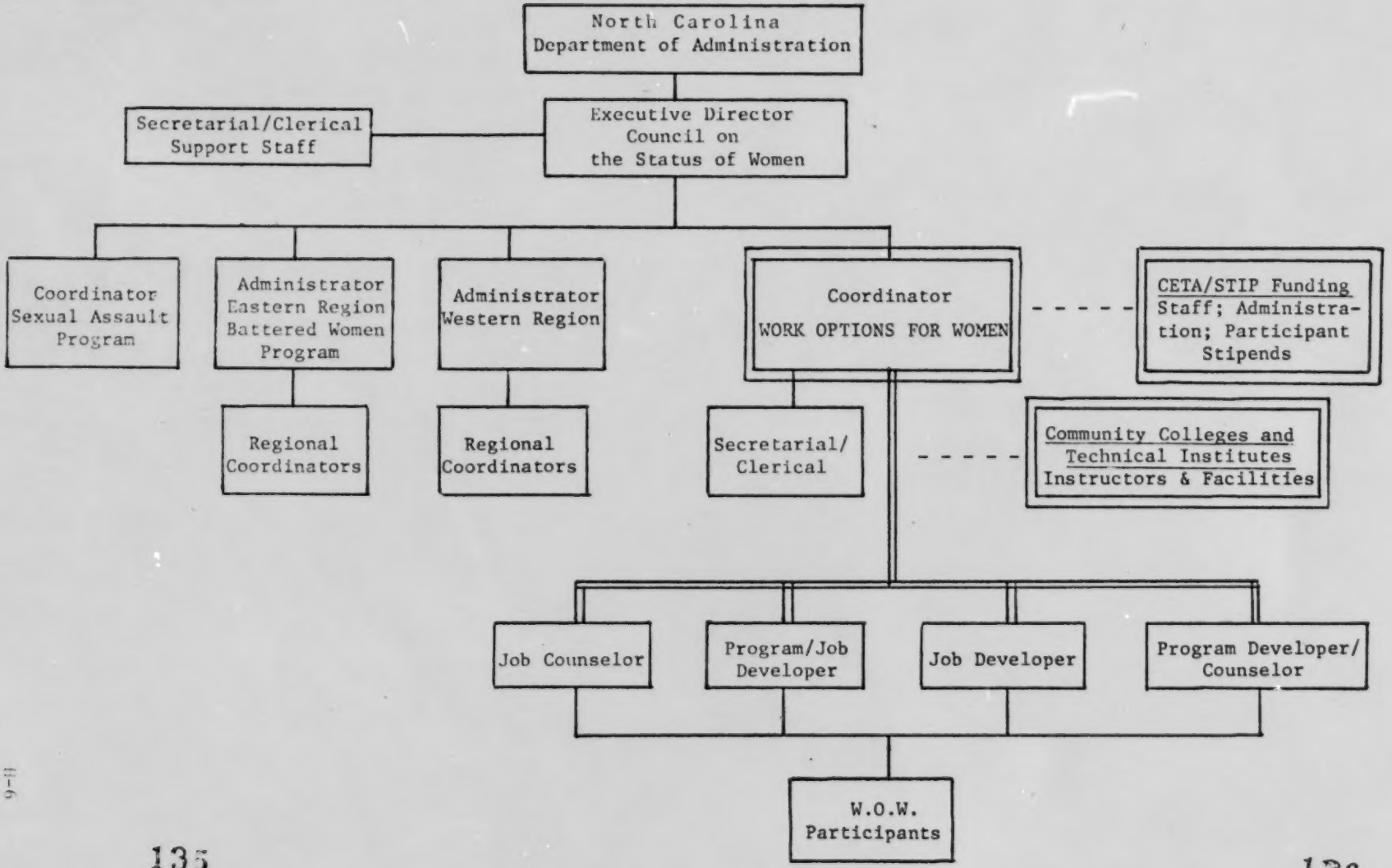
Target Population

Of the 950,000 working women in the state, 43 percent are single heads of households, with an average yearly income of $3,000. Black females in the state who are single heads of households have an average income of $2,857 yearly. In the last seven years, the greatest increase in the number of families living in poverty has been among the single female parent households.

Since the spring of 1978, about 400 low-income women have applied for the chance to learn traditionally male-dominated job skills through WOW. Of these, WOW has accepted over 100. More than half of the participants are black, their ages range from the late teens to the early forties, and the majority are not high school graduates. CETA designates separate funding for programs in urban communities, and stipulates that women participating in WOW be selected from rural areas. Data from some other training programs nationally have shown that similar populations with little or no work experience tend to have low completion and placement rates. This has not been true of WOW participants.

Figure 1

ORGANIZATIONAL AND STAFFING CHART
WORK OPTIONS FOR WOMEN



Program Staff

Table I describes the primary areas of responsibility for core staff in WOW. Their impact is enhanced through the involvement of a widespread network of contributors to the program. WOW was designed to include existing social service agencies, institutions, and industries in a cooperative effort. From the initial recruiting to the follow-up counseling with those placed on the job, individual staff members often share tasks and provide more than one service.

Although most of the core staff had little actual experience in vocational education or in women's programs, they did bring skills in counseling, job development, journalism, and business management. Their training as WOW staff was, in essence, on-the-job training. The first tasks were to gain an overview of the program, especially its goals and objectives, and to write work plans for the year. As the program evolved, these plans were expanded to be responsive to suggestions from WOW's clients and the communities. One necessary staff skill was described by the job and program developer, who said, "You need a good feeling for working with people. It's especially critical to deal with myths and attitudes of employers and not turn them off."

In addition to the core staff, WOW funds a part-time counselor at Wilson Technical Institute. Having a counselor on-site has provided for the Institute and the participants a visible and constant reminder that WOW students are an integral part of the school. The instructors at each of the five schools offering programs to WOW participants are also an important asset to the program. They are generally very interested in their students, and this concern, as opposed to purely financial motives, is evident. The director of the heavy equipment operation program at Wilson expressed this attitude well: "I know there's a lot more money to be made out in the world, but I get satisfaction from working with students, seeing them learn something entirely new."

Table 1

STAFF COMPETENCIES AND RESPONSIBILITIES

Program Coordinator

- Administer and coordinate staff and program components
- Develop proposals and programs
- Develop contacts with and knowledge of community--employers and educational systems
- Design and coordinate workshops and conferences for employers, women, and students
- Develop materials for recruiting, orientation

Program and Job Developer

- Contact existing skills training institutions about program development
- Contact industries and survey employment needs
- Recruit and conduct orientation for program applicants
- Set up on-the-job training programs
- Develop materials and workshops for employers
- Assist in job placement of participants

Job Counselor

- Recruit and counsel participants in training programs
- Conduct counseling sessions on job-seeking and retention skills, money and time management, interpersonal skills
- Conduct workshops on nontraditional careers for high school students

Job Developer

- Contact industry and employment agencies to find job openings for participants
- Arrange job interviews with employers
- Maintain followup with participants and with employers throughout on-the-job training period

Program Developer and Counselor

- Assist in recruiting and orientation of applicants
- Assist in counseling participants
- Develop brochures, posters, slide/tape show on women in skilled trade jobs
- Establish media contacts
- Compile information, resources, and directory on women in skilled trades

Program Facilities

One advantage of using existing agencies and institutions for recruiting and training is that no special facilities or resources are required. Staff offices are located in the building that houses the Council on the Status of Women, recruiting takes place in libraries or other community buildings, and training occurs in classrooms or sites provided by the colleges. On-the-job training, of course, goes on wherever the private employers are working. If a program such as WOW had to finance its own equipment and facilities, expensive courses such as heavy equipment operation would seldom be offered.

Program Activities

Recruiting and Selecting Participants. Posters, flyers, and radio, television, and newspaper ads all are used to announce the time and place for WOW recruiting sessions. A growing number of recruits have heard about the program from friends, relatives, and neighbors. Referrals from local social service and employment agencies are another source of applicants.

The WOW staff has developed a comprehensive checklist that details recruiting process. Recruitment strategies include: (1) preparing for the recruitment session, (2) interviewing applicants, and (3) following up potential participants. Each of the steps involves a whole series of activities to assure success. Included are publicizing times and places of meetings, setting up testing times at are community colleges, gathering background information on applicants, conducting tests on verbal, numerical, and manipulative aptitudes, gathering references on applicants, making admission decisions, and completing the necessary CETA, AFDC, and Employment Securities Commission papers.

Several criteria are used to determine which candidates will be accepted: minimum scores on tests; eligibility in terms of economical disadvantage; and personal interviews and references. Also important in the final selection process is the required two-day orientation session, where the motivation of applicants to succeed is examined closely. During the orientation, participants are given an overview of the program, the counseling services,

and the barriers they may face. Activities include exercises in assertive behavior, films such as "Why Not a Woman?," and discussions with employers and with women who are already working at nontraditional jobs. As WOW has expanded, the role models used during orientation are usually graduates of the program. Students are also introduced to the school personnel, facilities, and curriculum to make their entry into the new surroundings less overwhelming. WOW staff members feel the willingness of applicants to spend two unpaid days in the orientation is a good indication of their commitment to the program.

Many of the same recruitment and orientation procedures are being used by WOW in working directly with employers. In addition, women who are not eligible for CETA/STIP stipends are encouraged to attend the orientations and to enter employer on-the-job training programs individually. Community college personnel have been helpful in obtaining various kinds of student financial assistance for enrolled students, such as Basic Education Opportunity Grants.

Instructional Programs. There are currently five institutions offering programs to WOW participants. Programs of instruction include: carpentry, brick masonry, welding, heavy equipment operation, and electrical installation. Although the content of each program differs, the current offerings share similarities in design. All provide classroom training for at least six months with an experienced vocational instructor. Students learning to operate heavy equipment spend most of their time doing just that. One construction site which students work on was donated by the county and will become a recreation area when a lake is dug, roads are made, and a baseball diamond is leveled. The first carpentry class of WOW students completed a house that is now occupied by a private buyer, and a larger house has been more than half finished by the second all-female class of carpenters.

The students also attend four hours of classes each week in subjects such as math, blueprint reading, equipment maintenance, and job safety. One instructor said, "It's clear that women are entering a man's world.

They expect and receive the same treatment. This class is just another group of students." Other instructors and students agreed that there has been no lowering of standards or waiving of school requirements just because the students are women. The successful completion of six-months of classwork results in a certificate of competency, and, at the end of six months of on-the-job training, students are eligible to receive a state diploma.

Support Services. Weekly counseling sessions are required in all of the instructional programs. Additional counseling for individuals is also available whenever requested. The counselors continue to maintain contact with every participant during the on-the-job phase. The continuity of WOW's counseling component has provided the kind of support women need, particularly in nontraditional employment. Topics addressed in the groups cover developing good work habits, building self-confidence, and gaining assertiveness. When on-the-job trainees have had to face a few incidents of sexual harassment and biased attitudes, it has been beneficial for them to discuss such experiences and arrive at solutions with their counselor's help.

Counseling also involves carefully preparing participants to write resumes, complete applications, and interview for jobs. Employers have given valuable feedback to students by role playing job interviews with them. The informal, supportive peer counseling that occurs is especially important. To enhance that support, WOW staff tries to find placements for at least two women at any given training site. Students are also encouraged to use the schools' counseling services.

Financial support can make the difference between completing or dropping out for many students. Because public transportation is almost nonexistent in rural areas, WOW adds transportation costs to students' hourly stipends. Child care is another service that is needed. Although counselors maintain referral lists, each student must arrange her own child care. WOW does provide a dependent's allowance of up to $20 a week to enable participants to pay for child care. Books, tuition, and some equipment are paid for by the program because work boots, hard hats, and hand tools are not easily covered in a poverty-level budget.

Job Development and Placement. Identifying potential employment sites is one of the first steps taken by WOW staff. Employers are surveyed for available jobs before any program begins and before any recruitment takes place. The job developer sends letters to all area businesses and industries that might be associated in any way with the trade programs to be offered. Interested employers are asked to respond by setting up an interview with staff. During the initial interviews the program is explained and the employers present their needs and expectations. During follow-up appointments, if continued interest is shown, employers sign a nonbinding Proposal of Intent to provide on-the-job training slots and payment of $1.50/hour to trainees.

Matching the best candidates to the available jobs is done with advice from the instructors, counselors, and trainees. Usually several trainees are sent to be interviewed by each employer so that the employer can decide which trainee best fits the particular work environment. An on-the-job training contract is then signed so that employers who choose to can be reimbursed. Some employers pay the $3 an hour wage themselves rather than receive a $1.50 an hour reimbursement which is offered by the program.

At least once a month the job developer contacts each trainee and employer often by visiting the work site, to check on problems and to ask for suggestions to improve future programs. Counselors also talk to each participant regularly.

The Personnel Director of a paving and grading firm that has hired women said, "Their retention rate is as good as the men. They're conscientious about their jobs." Although it is too soon for any figures on long-term retention in working situations to be available, the on-the-job placement and short-term retention rate is over 70%.

Community Involvement and Support. As an advocacy group, the Council on the Status of Women has shown its support of the Work Options for Women program by its continued sponsorship. Community agencies in each of the regions where programs are going on have been cooperating with WOW from the beginning through their referral functions. Several students mentioned

that they learned about the program from their case workers. Construction trades employers have expressed interest in the program, and several have helped with the orientation sessions and have accepted participants for training.

Because the employers, in particular, are desired allies, WOW has planned a series of workshops specifically for employers. These will deal with the economic and legal issues for both employers and their employees, as well as attitudes and behaviors that can create good work environments. The personnel director of one supportive company is developing guidelines for other employers to follow in screening, training, and placing nontraditional employees on the job. These will be discussed during the employer workshops. The same contractor, who will be participating in high school career days, feels that "...people have to be sold the idea that women are as good as men in the labor market."

Costs and Funding Sources

Through the Council, WOW is able to use state cars and office space, the community colleges supply facilities and equipment, and the employers offer training sites. The bulk of the almost $800,000 CETA-funded budget, therefore, covers the stipends and other participant benefits, and staff and instructor salaries. The participants are paid $2.65 an hour for the actual number of hours in class, 10¢ a mile for transportation to and from class, and $5 per child up to a maximum of $20 a week. Tuition, books, and personal tools and equipment are paid for by the program. Salaries for instructors and counselors hired specifically for WOW classes are also included in the budget.

A side benefit of the program stipends has been the financial stimulus they provide to local economies. Women in the program are no longer receiving AFDC monies that had been costing the state approximately $138,000 a year, and are now able to buy more of the necessities for themselves and their families. The 25 women in on-the-job training are working for wages of $3 to $7 an hour, and their salaries have also eased their financial difficulties.

PROGRAM EFFECTIVENESS

Evaluation of program success is vital to refunding, and CETA, in particular, is concerned with completion of training and placement figures. Of the 13 women who completed the six-month welding program at Southeastern Community College, three are left to be placed in on-the-job training. The entire first group of carpenters from Anson and nine of the 12 graduates from Pamlico have been placed in training slots. Placing the students who completed the brick mason course was more difficult because contractors were reluctant to hire women. To avoid that problem, the job developer now identifies potential employers before students are enrolled. Although the women learning heavy equipment operation have not yet completed their course, several employers have already discussed employment possibilities with them.

It is still too early to conduct a follow-up of employees in actual work situations. Participants in the first WOW programs are still in their on-the-job training phase. Employers who were asked about future jobs for students indicated that "we have a commitment to hire graduates of Wilson," and "I'll keep the women on after the on-the-job training." Certainly the program is already having a local impact as evidenced by the interest of the media in each region served by WOW. Students, WOW staff, employers, and school personnel have been interviewed by newspapers and television stations. Because the program is sponsored by a state agency, it may have wider effects. The Coordinator feels that WOW is "the beginning of a strategy to take a single program and show how it can impact on the total number of women to be trained in a statewide network." This response was reinforced by the Council's Executive Director who said, "It's a demonstration program that proves low-income women can be trained in nontraditional jobs." The CETA program monitor agreed that "we can't expect men to be trained and placed any better."

Programs in electrical installation have been added using the facilities of two additional schools. This outcome--the spreading network of nontraditional training programs for women--provides added evidence that the WOW model works. Spin-off programs are surfacing as well at the secon-

dary level. The job counselor has begun a recruiting program through high school counselors to encourage and to inform girls about the available nontraditional vocational opportunities.

There seems little doubt that WOW has had an impact on the target population. The stated goal of WOW--to improve the economic condition of North Carolina women through vocational opportunities in nontraditional jobs--seems well on its way to being met. But the changes in self-concept and the personal feelings of achievement must be noted as well. The high level of confidence felt by many participants was exemplified by a woman heavy equipment operator who said, "What made me so proud on the site yesterday--the instructor told a guy to level it off. It took him five times and he still didn't have it right. I did it once and it was perfect. I just smiled."

PROGRAM FUTURE

All too often programs that work fall by the wayside as soon as outside funding ends. WOW has anticipated this problem by building into its model ways for schools, agencies, and private employers to continue the basic components without CETA-STIP support. The Dean at Wilson Technical Institute felt that "without the stipends, the nontraditional training program will diminish, but it will probably continue with 8 to 12 students through general financial aid. The school will have to make a bigger recruiting effort on its own. This program has sparked the interest of both the community and the school, and opened some doors."

The community college system is interested in increasing its enrollment figures, and appears willing to assist in the program's continuation. For example, Anson is now recruiting for a new six-month class for industrial sewing machine mechanics needed by the local textile industry. Trained mechanics make high salaries and traditionally have been men. The staff at Anson is already committed to recruiting women for the class. The President of Wilson felt: "Schools should change to meet the needs of the community. Therefore, deans and instructors are encouraged to spend time and resources for developing new programs, to devise flexible structures for programs and

classes, and to use outreach personnel to knock on doors in the community to find out what educational services are needed and can be provided."

Two program modifications were discussed by staff as highly desirable. Motivated applicants who do not meet CETA eligibility requirements are prevented from full participation. Staff and participants agreed with the counselor who said "...a good number of women were excellent candidates and couldn't qualify as CETA-eligible. They're always caught in the middle--not a low enough income and not enough money to just go to school. They need help just as much!" Another concern is the restriction placed on areas of recruitment. The existing program, because it is based on CETA balance-of-state money, prevents the acceptance of applicants from urban communities that are funded by other prime sponsors. There is no question that rural women benefit from training programs; nevertheless, it was felt that a potential pool of applicants from urban areas was being neglected.

Another suggestion for change involves using modular or open-entry training periods. Twenty-six of the state's 3,000 apprentices are women, a fact that has prompted WOW staff to investigate the use of apprenticeships as alternate training situations. Private industry is another source of training being explored presently.

REPLICATING THE PROGRAM

The essential components of the Work Options for Women program are adaptable to successful replication. Conceptually, the program's structure is simple--find the jobs, develop the necessary training cooperatively with employers and trainers, and support the participants emotionally and financially. Key to the program's implementation are the following strategies:

- Recruit intensively through widespread media use, agency referral, and personal contacts
- Conduct detailed and realistic orientation/information sessions
- Screen applicants carefully to insure commitment
- Match training programs to actual job possibilities and employer needs

- o Develop preplacement work agreements with employers
- o Provide supportive services for stipends, counseling, and follow-up.

The program staff emphasized that in all phases, from recruiting to follow-up, regular contact by mail, telephone, and in person must be maintained with participants and with employers. This strategy allows problems to be prevented as well as solved.

The Work Options program is being implemented in a state that is predominantly rural, has a low wage scale, and is almost totally nonunionized. These factors may have an impact on program success. In other geographic regions of the country, tight union control of construction trades or a wage scale so high that stipends are little incentive might present obstacles to replication.

Developing program-specific materials has been an ongoing activity of WOW staff. Potential replicators may be interested in these as examples that can be adapted for their own particular programs. In order to portray the expanding opportunities in the skilled trades for women, a slide/tape show is being developed for use with many groups, from employers to high school students and their parents. Guidelines for employers are being written for use initially at the series of workshops and then for general distribution to interested employers. Checklists for job and program developers, the steps for recruiting and screening participants, and the suggestions for counseling activities have been developed and are instrumental in helping WOW staff to carry out their functions.

CONTACT PERSON AND ADDRESS OF PROGRAM:

Claire Millar, Project Coordinator
Work Options for Women
526 N. Wilmington Street
Raleigh, North Carolina 27604

DO NOT RUN THIS PAGE

INDUSTRIAL ORIENTATION

Eugene, Oregon

PROGRAM OVERVIEW

One woman enters the all-male atmosphere of an automobile mechanics program and finds the first day that she is "years behind" the other students in skills. Another woman, a single mother, wants one of the higher-paying, nontraditional (for women) jobs to support her family, but does not know what she really might be able to do. Another lacks the self-confidence and technical "know-how" to work in an industrial job.

These and other women like them are gaining the skills and confidence they need to pursue nontraditional careers in a course called Industrial Orientation offered at Lane Community College in Eugene, Oregon. Industrial Orientation, supported by federal vocational education funds through the Oregon State Department of Education, provides "hands-on" experience in eight different vocational areas: drafting, mechanics, woodshop, electronics, blueprint reading, machine shop, construction, and welding. Students learn the use of tools, equipment, and materials of each occupation in typical job projects. They also learn about the world of work in industrial settings and address the issues of psychological and physical preparedness for nontraditional employment.

The Industrial Orientation program is not designed to provide entry-level vocational skills. Rather it is prevocational and exploratory, allowing those who lack even basic familiarity with the terminology, tools, and skills of many trades to acquire such familiarity. Nor is the program exclusively female, although most enrollees are, in fact, women. It is modular in nature, allowing students at the community college to explore whatever specific topics interest them. They receive in turn one hour of credit for each 12-hour module completed. While the course leads some of the enrollees into vocational programs at the college, for others it simply provides a new appreciation of the trades involved, and perhaps an increased ability to work on their car, repair their appliances, or remodel their homes.

The following comments of women students and "graduates" of Industrial Orientation typify the feelings of many:

> "I had registered for a regular automotive technology class but I 'chickened out' . . . I needed to get my feet wet . . . Now I'm majoring in automotive technology thanks to Industrial Orientation."
>
> "I am a recent divorcee and realized secretarial work wouldn't do it. I needed to get paid more."
>
> "I gained some real survival skills . . . there's more things I can do myself . . . I work on my own car and can do tune-ups and brake work."
>
> "I was going to take secretarial classes . . . more secure. But now I'm in the Machine Shop and Drafting Modules. I think I'm going to major in drafting."
>
> "It occurred to me in class that I could work for myself, work on other people's cars. In no other classes have they pushed me toward working for myself, being independent."

PROGRAM BACKGROUND AND DEVELOPMENT

The roots from which the Industrial Orientation course developed grew from seeds sown in September 1974. At that time, the mutual interests of a Lane Community College (LCC) counselor and the college's Community Relations Specialist resulted in a workshop for the community entitled, "There's a Woman in the Men's Room." This title derived from the fact that there were no women's restrooms in seven of the major vocational shop areas on campus, an issue which became a symbol of obtaining equal opportunity for women at LCC. While the restroom problem was finally resolved in the Spring of 1978, the 1974 workshop was intended to assess the college's and community's interest in the issues of sex equity and nontraditional vocational training for women. This interest was dramatically demonstrated when over 350 people attended the workshop.

Due to the impetus of this workshop, the Dean of Instruction agreed to the formation of a community advisory committee to advise the college about future needs and directions related to sex equity and special programming for women. This Women's Program Advisory Committee of over 25 members represents the viewpoints of business, labor, industry, the professions,

the schools, community agencies, women's organizations, and the community at large. Informal meetings began, and the first formal step toward a program came the following spring, when the Community Relations Specialist was allowed to use 40% of her time to provide staff development and awareness training related to sex equity and women's educational needs. Efforts were focused on LCC staff inservice workshops on sex role stereotyping and on formally convening the newly approved Women's Program Advisory Committee.

The 1975-76 school year was an experimental one during which, among other things, a Womens' Program office (later the Women's Center) was established, plans for future services were generated, staff development activities were designed to develop awareness and skills for providing nonsexist education, and a position paper based on the year's experiences was submitted. This paper included recommendations for institutional action. As a result, a full-time Women's Program Coordinator, who had faculty status and reported directly to the Dean of Students, was hired at the beginning of the 1976-77 school year.

At this time the basic philosophy of a Women's Program "network," of which Industrial Orientation is only one part, was made explicit. This network is based on the following operational premise: rather than offering isolated women's studies classes, counseling, upward mobility seminars, women's workshops, nontraditional job placement, and other such offerings out of the Women's Program Office, as is done in many other institutions, the Coordinator's efforts at LCC would be focused on staff development to help all college personnel identify, plan, and implement changes and additions necessary in their own areas. This would allow needed services and classes to be established and sustained within already existing departments.

Women's Program staff members feel that the major disadvantage of this approach is that it may take longer to get services and classes functioning effectively than it would through a special Women's Programming Department. However, the advantages are that expensive duplication can be avoided and every area of the college can be affected. The classes and services will not become isolated by being clustered in a single department. Furthermore, staff members feel that a great deal of increased awareness will

occur simply as a result of collaborating to design, implement, and sustain these activities.

Some examples of network activities already underway include: returning women's workshops, assertiveness training, and nontraditional career planning classes in the Counseling Department; Women's Studies classes in the Social Science Department; a task force for women in management in the Business Department; an advisor and class to deal with "math anxiety" in the Math Department; Title IX Self-Evaluation in the Office of Research and Planning; and a project during 1977-78 to provide personnel data for Title IX and Affirmative Action purposes in the Office of Business Operations. Of course, the Industrial Orientation class, which affects several industrial vocational departments, is part of this network and both shares its resources and contributes to its pervasiveness.

Industrial Orientation

As the Women's Program was developing and exploring issues, it was soon discovered that only a sprinkling of women had ever enrolled in various "men's " programs over the years at LCC. Of those that did enroll, even fewer graduated. Of the more than 40 vocational programs offered by the college, women students were clustered in only 12 programs, many of which trained women for lower-paying, non-technical, non-managerial, service-oriented occupations such as secretarial science, legal assistant, early childhood education, and nursing. It was clear to Women's Program staff that women needed to expand their career options.

During the 1976-1977 school year a Task Force on Nontraditional Training Programs for Women was formed to address the issue. The Task Force included the LCC Director of Vocational Education/Special Training Programs, several counselors, the Women's Program Coordinator, department heads of electronics and mechanics, and a nontraditional female student. They proposed a hands-on career exploration class wherein women could sample a number of vocations to permit a more knowledgeable career decision. The result was the Industrial Orientation Workshop, which was first offered in the spring term of 1977 on a pilot basis. It is now offered every term as a regular pre-vocational class. Initially the Coordinator of Industrial

Orientation was paid on a part-time basis to coordinate that class. Since then, however, a vocational education grant from the Oregon State Department of (Vocational) Education has made it possible to hire a person full-time to coordinate the class as well as to facilitate other activities to increase enrollment and success of students in nontraditional programs.

The Industrial Orientation class has as one objective moving more women into the skilled trades. It is designed to help those people who lack even elementary awareness of the required mechanical and technical skills for those trades. Individuals who have never built a treehouse or go-cart, tinkered with old radios, designed erector set models, worked on cars, or taken shop or drafting classes often lack basic mechanical skills and consequently do not consider skilled trades as available options for themselves.

PROGRAM DESCRIPTION

Target Population

The student body of Lane Community College is approximately 96% Caucasian, 80% first-year students, 65% single, 52% female, and the average age is approximately 27. The low-tuition college serves a 5,000 square mile area with a population of approximately 250,000. Industrial Orientation is available to any student at LCC. It is aimed at the student who lacks first-hand knowledge of skilled blue collar occupations. It is especially useful for women (who comprise about 80% of the enrollees) interested in looking beyond the traditional clerical or service occupations. During the fall term of 1978, two sections of Industrial Orientation were offered. The added second section was offered in the evenings in order to reach a larger target population, including those students working during the day.

Program Staff

The person directly responsible for Industrial Orientation is the Associate Coordinator of Women's Programs, who has faculty status. She is supervised by the Women's Program Coordinator although the actual coordination of Industrial Orientation is also supervised by the Director of Special

Training Programs. The Industrial Orientation Coordinator teaches the Industrial Environments module, hires expert instructors for the other eight modules, coordinates the instructor in-service training, obtains the materials, equipment and laboratory space for student use, manages enrollment and grade reports, and maintains continuous contact with students throughout the term. She also acts as a liaison and nontraditional training "advocate" with various college and community groups, including Student Personnel Services, Academic and College Planning, College/Community Relations, Cooperative Work Experience, Student Employment Service, and local schools, employers, and apprenticeship programs. Her job description also includes the following two goals: (1) to initiate activities designed to result in a balanced ratio of female and male instructors in vocational programs at LCC, and (2) to assist in securing additional funding to implement the goals of the program.

The other essential staff position for Industrial Orientation is that of instructor. Instructors are selected from both within the college's vocational departments and from industry, based on ability to teach the basic, pre-vocational skills, and ability to be an unbiased role model for women students. In-service training for new instructors facilitates instruction and continuity within the course. The program has had women instructors in woodworking, blueprint reading, and welding. Women assistants have served in mechanics, woodworking, welding and construction.

Instructor aides, usually second year students in technical-vocational training programs, assist the students by providing additional individualized attention in several modules. One "graduate" of Industrial Orientation, a female drafting student, is teaching the evening drafting module for the fall term of 1978.

The Coordinator of Industrial Orientation feels that teacher characteristics are critical to the course's success. She seeks technically qualified instructors who are committed to educational equity and who are sensitive to the needs of women in nontraditional careers.

Program Facilities

Office and classroom space for the Industrial Orientation program is provided by the college. All tools, machinery, and facilities are shared with the regular vocational training departments. The Industrial Orientation budget is able to provide minimal funds for consumable supplies, some small tools, and certain materials (lumber, metal) used directly in the classes.

Program Activities

Recruiting. Many recruiting tools and strategies are used to attract students for Industrial Orientation. These include newspaper articles, Radio/TV spots, brochures, flyers, and posters. Information is distributed to Food Stamp Centers, the Unemployment Office, welfare agencies, utility companies, laundromats, and other locations on a community "poster route." Workshops, Career Fairs, and visitations to high schools are conducted. A color slide/tape presentation has been developed. The College/ Community Relations Office and the Women's Center lend support to the publicity efforts of Industrial Orientation.

Referrals of students to the Industrial Orientation program are garnered from regular vocational instructors, from Women's Studies classes, and from other related classes such as Career Planning, Life Management, and Coping Skills. The Apprenticeship Information Center in Eugene refers students to Industrial Orientation and other vocational training programs. LCC's counseling department is most supportive, especially for undecided students needing to explore technical-vocational careers. Word-of-mouth, especially via former students, has proven to be an effective recruiting tool as well.

Instructional program. The Industrial Orientation course is composed of the following nine modules:

Drafting	Electronics	Construction
Mechanics	Blueprint Reading	Welding
Woodshop	Machine Shop	Industrial Environments

Each module lasts for two weeks and consumes 12 hours of class time. In the day section a student takes two modules concurrently. Classes meet Monday, Wednesday, and Friday afternoons for four hours, two hours for each module. The evening section takes twice as long to complete because modules are taken only one at a time. Evening classes meet two evenings a week for three hours per evening.

The entire Industrial Orientation course offers ten credits, one credit for each 12-hour module (the Construction module is four weeks long and is equivalent to two regular modules). A student may take one, all, or any number of modules for variable credits, depending on her interests and needs. Because it is an experiential class, credit is given on a pass/no pass basis only. This alleviates much of the anxiety some students feel as they try new skills. There are no homework assignments or tests. For credit, active attendance is required for at least eight of each module's twelve hours of class time. The cost to students is $10.90 per credit hour.

Industrial Orientation teaches students the terminology, tools, equipment, materials, work setting and environment, job salaries and benefits, safety, and training requirements of jobs in all eight industrial areas, plus many general points of interest in the ninth module, Industrial Environments. Central to Industrial Orientation's goal is the active, hands-on participation of students on job activities. From their experiences, students learn more than the routine job tasks. They learn basic skills, how the work feels, how their own abilities and interests can be developed into marketable skills. Students begin to actively and realistically consider the possibility of themselves as skilled workers. Just as importantly, some students also may learn that certain skilled trades areas do not match their interests and abilities.

To the extent possible, the curriculum of the course is planned to optimize continuity and to demonstrate the interrelationships of the various industries and industrial skills for students. For example, in the Drafting module students draw plans for projects they will construct in the Woodshop, Machine Shop, and Construction Modules. In Blueprint Reading, students

construct models from cardboard and other materials from the plans they draw in Drafting. Each module strives toward the completion of an actual "product" which the student can take from the module. Past projects have included screwdrivers, nightstands, drill gauges, bookcases, and a 6 x 12 foot lumber shed. Students also help on a large house-building project of a regular construction technology class.

In the Industrial Environments orientation module, taught by the Program Coordinator, students take field trips to industrial shops, sometimes working briefly with employees. They also learn about apprenticeships, about the physical and other requirements of work in industrial settings, about employer expectations, and about career limitations that may be imposed by the lack of math skills. Guest speakers and group discussions are used to pose possible problems and to suggest solutions to problems that may be encountered on the job. Women in industrial careers or in vocational training programs are used as role models whenever possible.

One student described an enlightening field trip to a local cabinet-making shop. As it turned out, the employer was quite hostile with respect to women workers. He was reported to have said words to the effect, "We're not hiring women. They can't do these jobs." The student felt the experience was valuable for showing this "bad" side of the real world. She also claimed that her incentive and motivation for pursuing a nontraditional career had consequently been strengthened.

Support services. Industrial Orientation itself provides no special support services for students, although the Coordinator provides individual support whenever possible. In addition, students in Industrial Orientation may avail themselves of the plethora of social, health, recreational, counseling, and other services offered to all students at LCC. Also, as part of the Women's Program network described earlier, Industrial Orientation students can utilize the specialized services of the Women's Center and other components of the network. In addition, articulation is maintained between Industrial Orientation and LCC's regular vocational training programs so that students may easily pursue formal, long-term training in the areas of their choice.

Job development and placement. While it is possible that Industrial Orientation "graduates" could go directly into some skilled trade areas, the course is not designed to provide entry-level skills to students. The course is pre-vocational and exploratory. For this reason job development and placement is not addressed directly by the program. As with other support services of the college, Industrial Orientation students may use the services of the Student Placement Office and the Cooperative Work Experience program.

Costs and Funding Sources

The basic support for the Industrial Orientation program is provided by the Oregon State Department of Education from federal vocational education funds. This $17,000 grant covers the salary of the full-time Coordinator for the Industrial Orientation program. All other costs of the program--including, most importantly, instructor salaries--are borne by Lane Community College.

The Director of Special Training, who oversees and administers Industrial Orientation, says that he has had to "carve out" monies from regular programming to support instructor costs. While he recognizes the value of Industrial Orientation, he makes it clear that additional sources of funding must be explored in order for the program to continue. The program staff has done this by writing proposals to various agencies including the County CETA Agency and the Department of Labor which build on the strengths of the Industrial Orientation program and allow it to continue and expand.

PROGRAM EFFECTIVENESS

There does not exist a great deal of statistical information regarding Industrial Orientation's effectiveness or success. While some counts of enrollments and attrition are available, it is not possible to make a meaningful statistical evaluation, nor even clear this is appropriate for such a program. Most information regarding the effectiveness of Industrial Orientation is in the form of subjective reports of attitudinal change on the part of college administrators, instructors, students, employers, and other community members.

It must also be remembered that students take Industrial Orientation for many different, equally valid reasons, other than to prepare for formal vocational training. For example, a home economics teacher plans to incorporate much of the material from the course into a new home economics curriculum. Many women (and men) have taken the class to gain skills for personal use. They learn to understand, repair, or build things they use daily, while gaining a measure of self-sufficiency. After taking the class, women have tuned up their cars, relined brakes, repaired major appliances, tackled remodeling projects, and one woman built a chicken house. These are all projects they would not have attempted before taking Industrial Orientation. While these people may not be entering nontraditional jobs, they are nevertheless contributing to the changing attitudes about women's roles.

Industrial Orientation is being utilized in ways not envisioned when it was begun. For example, drafting students are enhancing their major program by taking the welding, machine shop, construction, and woodworking modules to better understand the function and operation of the projects they draw. Construction technology students without previous experience are taking the construction and other modules to quickly gain basic skills. One regular vocational instructor who also teaches an Industrial Orientation module has noted that students, especially women, who have come to his regular vocational classes from Industrial Orientation tend to drop out less often.

An informal follow-up survey of students from the first three sections of Industrial Orientation reveals that approximately 25% of women students in the program have selected, begun, or completed regular nontraditional training programs or classes. Others are completing math courses as prerequisites for electronics and other programs. Each term the enrollment for Industrial Orientation has increased. Also, each student is asked to evaluate each module after she or he completes it. These student evaluations have generally indicated that students feel the program is very worthwhile.

One visible sign of success is that the college, with vocational education money from the State Department of Education, has funded a full-time Project Director for the program. Another development is that the Center for Women's Opportunities of tne American Association of Community and Junior Colleges in Washington, D.C., has identified Lane Community College as one of six colleges in the nation having exemplary programs for women. Carol Eliason, Director of the Center, said, "This is the only college that we've identified that has put together the relationship that if you don't understand tool usage, if you don't know about these nontraditional occupational programs and what it means to work in those fields, then you're never going to sign up to take a course in it."

PROGRAM FUTURE

Notwithstanding the apparent high cost of Industrial Orientation, the future of the program appears to be bright. The Director of Special Training, in anticipation of the day when state and federal vocational education funding may end, is currently trying to devise a way in which his department, other departments of vocational education, and the college's General Fund can pick up the salary of the Program Coordinator. As mentioned earlier, he hopes additional funds can be generated through grant and proposal writing.

The Coordinator has a number of specific plans for expanding and improving the Industrial Orientation program. Among these are the following:

- Establishing a Mechanical Skills Study Center, in which students can go to an area, at their convenience, to practice using a wide variety of wrenches, levels, calipers, power tools, and mechanical techniques with which they want familiarity.
- She would like additional resources to conduct more extensive follow-up surveys on Industrial Orientation students as well as surveys of employers to determine what their training needs are.
- She would like the flexibility to offer Industrial Orientation over the summer months so that students who complete the course could enroll directly in one of LCC's full-time vocational training programs which begin in the fall term.

- Although currently regular programs have priority for shop space, she feels the course could reach more women if it were offered in the morning when child care might not be such a critical problem.

- She wants to develop a funding source to offer a nontraditional career exploration class for men called Technical Service Orientation. This modularized class, which has already been approved by the college, would explore such areas as early childhood education, food service, nursing, medical and dental assisting, clerical, and other traditionally female occupations.

REPLICATING THE PROGRAM

There do not appear to be any features of the Eugene, Oregon area that preclude a program similar to Industrial Orientation being established elsewhere. It could be done most easily within the structure of a community college or similar institution. The numerous facilities and support services provided by LCC represent a significant hurdle for any independent agency to attempt to duplicate.

A second important consideration is program staff and instructors, who must be aware of and sensitive to women's issues, and to male students who may feel they lack skills "men should have." They must be unbiased role models for students. One teacher expressed his and other teachers' attitudes in this way (speaking of students): "There's nothing wrong that you don't know what a crescent wrench is. Not knowing is not a fault.... Instilling confidence is the biggest thing."

Other key features of the Industrial Orientation program that observers and participants feel are essential to the success of the program include:

- A strong network of specialized services for women. The Women's Program serves both as a catalyst for services and a support system for women exploring nontraditional careers.

- Industrial Orientation is <u>not</u> exclusively a "women's" program. It is part of the college's mainstream programming, overseen by the Special Training Department of the Community Education Division.

- o Interdepartmental cooperation and flexibility allows a program of this type to be integrated with existing programs and courses.

- o The course itself is experientially oriented, emphasizing hands-on learning in a "you-cannot-fail" environment.

- o A full-time, "high energy" Program Coordinator.

One additional note. An informative, step-by-step narrative history of the development of the Women's Program at LCC is available from Anne Stewart, Women's Program Coordinator, at the address below. The publication, People Have Their Own Rooms, is replete with anecdotes and strategies that may be of use to others trying to establish similar programs.

CONTACT PERSON AND ADDRESS OF PROGRAM

Ms. Leslie Rasor
Associate Coordinator, Women's Programs
Lane Community College
4000 E. 30th Avenue
Eugene, Oregon 97405

FACET/FACIT

Charleston, South Carolina

"The program took Southern young ladies and turned them in new directions."

An Instructor

"Very practical. Not like the four-year college I went to. Everything taught you can use."

A Female Graduate

PROGRAM OVERVIEW

A local beautician, Anne, heard about FACET (Female Access to Careers in Engineering Technology) through a customer's husband, who gave Anne a FACET brochure. It sounded interesting, and she joined the summer session of 1978, taking an introductory course in engineering technology and an intensive review of math. Reacting positively to these, she enrolled in the one-year program in industrial drafting at Trident Technical College. Despite the responsibility of keeping house for a husband and two children and of working after school at her old job as a beautician, Anne reports that she is enjoying the Trident classes, particularly her drafting course, and she finds her instructors "very helpful." In Anne's words: "The programs have made me self-confident. For the first time in a long time I know I am using my mind."

Situated in Charleston, South Carolina, FACET is essentially a recruitment and support program to encourage more women to earn an associate degree in engineering technology. It currently assists women to enroll in the seven associate degree programs in engineering technology offered at Trident Technical College (TTC) in Charleston. These programs include mechanical, architectural, electronic, electrical, general, civil, and chemical engineering technology. In 1979, the project will be expanded so that women can earn a diploma in industrial technology as well. To accommodate this change, the project is now call FACET/FACIT.

The chief means of recruitment is an aggressive campaign to attract girls and women (particularly high school girls) to FACET's subsidized summer course, an introduction to engineering technology. Graduates of the summer program are then encouraged to apply to the engineering technology programs at Trident Technical College. For those who sign up, FACET sponsors special services during the school year. It holds a monthly "Nurture Group," in which discussions of relevant topics are held; women from the faculty and from industry are invited to these sessions. It provides counseling, formerly through the college and currently through its own staff counselor. And it provides tutoring in English and math, and extra help from interested engineering technology faculty.

Initially funded by South Carolina's State Office of Vocational Education, FACET now receives complete financing from the Federal Office of Career Education. It began in response to several needs. The college needed larger enrollments in its engineering technology programs. Local industry needed more technicians, and many were under pressure to hire more women. And women were sorely in need of more and better paying jobs in the area. The program was a solution to all three problems. Its ultimate goal is to graduate at least 35 qualified female engineering technicians yearly and to place them into interesting, well-paid, nontraditional work positions. More generally, the goals of the project are:

> ...to encourage females to study engineering technology; to provide female technicians to local industries; to establish close working ties between Trident Technical College and the local high schools; to provide for a permanent emphasis on nontraditional careers for women at the college; and to see the project replicated in at least two other two-year colleges.

There are a number of indications the program is having success. From the spring of 1977 to the fall of 1978 female enrollment in the TCC engineering technology programs rose from 6%to 14% of the total enrollment, and the number of minority females rose significantly. Overwhelming majorities of students and faculty members involved rated the program as "excellent" or "good." And many of the program's objectives were reached.

PROGRAM BACKGROUND AND DEVELOPMENT

A significant factor in the project's development has been its ability to co-function with men: men in administrative and teaching roles at TTC, men in industry, and men in the Charleston community. This alliance began with the inception of the program, as a man and a woman conceived the idea for the project and a planning group comprised of men and women from the TTC administration and faculty developed the idea and wrote the proposal for funding.

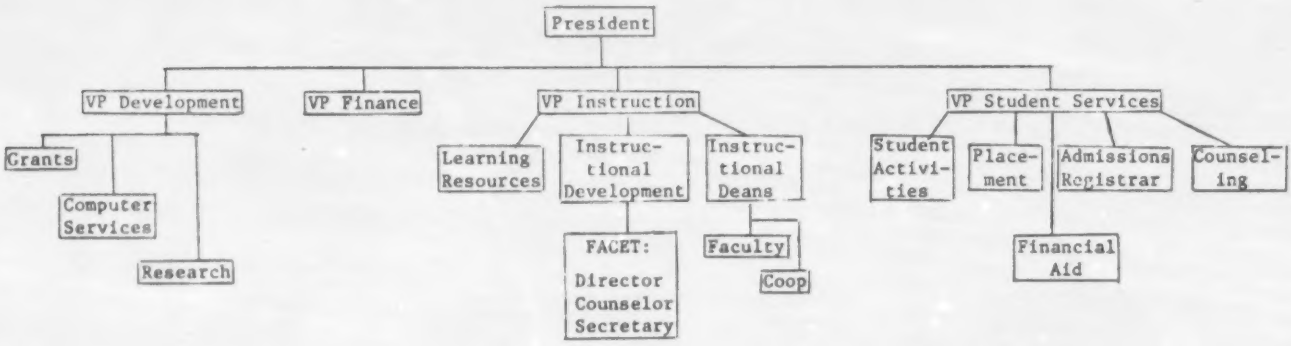
The project developed in response to definite needs at Trident Technical College and in the Charleston labor force. A critical school need was for increased enrollment in the engineering technology programs, as these programs were being cut back for lack of participants. There was concurrently a shortage of engineering technicians available to local industries. And Affirmative Action was pressing these industries to increase their numbers of female engineering technicians. But there were not enough female technicians available. Ironically, female unemployment was greater than male unemployment in the Charleston area; there was also general underemployment of women. All of these needs increased the demand for skilled women in industry and the demand for students in the engineering technical programs at TTC.

At that time, the Vice-president for Development (a female) and an instructor of mechanical engineering technology (a male) met in an attempt to solve the TTC enrollment crisis. She suggested an increase in female enrollees; he concurred. She suggested applying for grants. Together they came up with the idea for a special program to bring more women into the college's engineering technology program.

Next, an unofficial committee was formed to write the proposal. Among others, it included the Director of Grants, the instructor in mechanical engineering technology, the Director of Placement, the Director of Media, a student counselor, the Director of Admissions, and the Director of Instructional Development. Each brought his or her expertise to the task. But the Director of Grants and the Director of Placement had particularly

significant roles: the former wrote the grant on two-week notice (parts were assigned to members of the committee); the latter acquired the necessary commitment to FACET from local industry. And South Carolina's State Office of Vocational Education approved the proposal and provided initial funding.

In the winter of 1977, the college hired a director of FACET, the only existing staff position at that time. In the fall of 1978, a counselor was added to the FACET staff. Also at that time, the project moved from its original organizational position in the Office of Development, to the Office of Instruction. FACET's place in the college's organizational structure, and some of the Trident administrative offices that perform services for FACET, are illustrated below:



Physically, FACET is located within the Department of Engineering, as it coordinates many activities with members of this department.

At its inception, the project launched a media campaign to gain support from the community. The continuing use of media (posters, brochures, interviews, television advertisements, news releases) has cemented this support. In addition, the President of the college sent personal letters to parents of prospective students. Summer students, current engineering students, and graduates of the engineering programs also spread the word about FACET. As the Director comments, "from the beginning there was a broad base of support for this project."

There are many factors that facilitated the adoption of FACET. Among these are: an existing training program for engineering technicians (and a need for enrollees in the program); a demand for female technicians in local industry; the support of top administrators in the institution (in FACET's case, the support of the Vice-president for Development and the President of the college); the support of key faculty of the institution (in FACET's case, the people on the planning committee and the dean and instructors in the Department of Engineering Technology); and sensitivity to women entering nontraditional careers (aided by the Vice-president for Development, who was experienced in vocational education and in reducing sex stereotyping in vocational education). In addition, the FACET group worked hard to win the support of people in the community and of agencies at the state and federal levels.

PROGRAM DESCRIPTION

Target Population

Located in Charleston, South Carolina, Trident Technical College serves a three-county area. The unemployment rate for the three counties, in the fall of 1978, was 6.6%. Employment density is highest in three occupational groups: professional-technical, clerical, and crafts. Prior to the mid-1960's, the state of South Carolina was highly rural, with little industry, but during the 60's there was a surge in industrialization. This industrial growth is now accelerating.

Of the 84 students enrolled in the FACET 1978 summer course, 60% were high school juniors, 37% seniors, and 3% graduates. Of this group, 42% were black, 56% white, and 2% Oriental. All were women. Comparison figures for the regular TTC engineering technology programs show that women comprise 14% of the enrollment. Of the 97 women enrolled in the fall of 1978, 85% were white.

FACET students are selected on the basis of five criteria: number of math/science courses taken, math/science grades earned, recommendation by a teacher, written statement by the student, and interview with two members

of the admission panel. The panel members include two engineering technology faculty, one TTC admissions officer, the FACET Project Director, the TTC Career Development Officer, and a counselor (who is also co-chairperson of the Nurture Group).

Project Staff

Until the fall of 1978, the Project Director made up the entire staff of FACET. The hiring committee had wanted a female project director with background in a technology-related field. They hired a woman with experience in teaching, administration, and handling federal programs; she had majored in math, a field related to technology. To prepare for her work at FACET, the new Director spent inservice time in an engineering firm, made contacts in industry, and took a chemistry course in the TTC engineering technology department. She feels that her technical background, experience with high school students, experience in industry, past management of federal projects, involvement with women's organizations, knowledge about employment, and working with staff and faculty at the college were all valuable in her preparation for the job.

The FACET/FACIT Project Director is solely responsible for running the project. Tasks from FACET's inception in summer of 1977 through September 1978 describe her major functions:

- Write copy/produce slides for media spots.
- Visit secondary schools.
- Establish contact with local industry.
- Provide continuous inservice training to reduce sex bias among faculty and staff (i.e., workshops, seminars, curriculum development and revision activities, counseling sessions, etc.).
- Design curricula for preparatory and pre-engineering programs (summer course).
- Employ instructors for preparatory and pre-engineering programs (summer course).
- Implement preparatory and pre-engineering programs (summer course).

- o Complete annual evaluation.
- o Write final report.

Hired in fall 1978, the project's counselor has a masters' degree in counseling and has worked as a social worker, in particular with welfare mothers. She feels the skills needed for her new job include background in counseling, knowledge of the local labor market, contacts with local agencies, and a commitment to sex equity. The roles of the FACET/FACIT counselor include:

- o Counseling girls and women in all the FACET/FACIT programs.
- o Organizing the Nurture Group.
- o Recruiting girls and women for the programs.

In addition to the FACET staff, the faculty of the engineering technology and the industrial technology departments play an important role with FACET/FACIT students. A deliberate effort was made to increase the engineering technology faculty's awareness of sex bias and sex-role stereotyping. Throughout the year, relevant articles, statistics, and case histories were circulated among them. For the benefit of staff and faculty, FACET also sponsored two workshops that dealt with sex bias and sex-role stereotyping. The result has been an increased sensitivity to women training in nontraditional fields.

Program Facilities

FACET/FACIT saves money by operating within an established technical college, and the project makes use of many of the facilities of the college. The program uses three offices, one each for the director, the counselor, and the secretary. The director and secretary are housed in the school of engineering technology; the counselor shares offices with the college's counselors. The summer course, the Nurture Group, special seminars, and other program activities are held in various college facilities.

Program Activities

Recruiting. Recruitment is a major activity of FACET. The summer course is a chief form of this. To interest high school students in the

summer program, the Project Director makes visits to local schools where she speaks to math and other classes with students potentially interested in the program. She is also in contact with counselors at the high schools.

At these recruitment sessions, she uses the "public awareness materials" developed by her and the college's public information office. The materials consist of a brochure, a poster (both based on the theme "Seven Beautiful Careers in Engineering Technology"), and a film entitled "Make Something Happen." Also used by radio and television, the 12-minute film features women ("role models") in the Charleston area who are studying engineering technology or who are already working in the field. All the public awareness materials have a polished appearance.

Spanning eight weeks, the first FACET summer course was designed to introduce students to careers in engineering technology, and met each week day from 8 a.m. to 12 noon. All but 26 of the 84 original participants took special remedial math courses in Math Essentials, Introductory Algebra, and Algebra Fundamentals; students were prescreened for these according to scores on the North Carolina Math Test. The summer curriculum overviewed the TTC programs in engineering technology, relying heavily on laboratory formats, and also touched on measurement, data gathering, small engines, physics, and machine tools. In addition, a course in problem solving served as an introduction to the curriculum, and several sessions were devoted to "communications" (assertiveness).

Twenty TTC staff and faculty contributed to this course, which was called "Careers in Engineering Technology." Included in the 20 were the President of the college, the Dean and eight members of the engineering technology faculty, four members of the industrial technology faculty, two members of the arts and science faculty, one counselor, the Registrar, the Admissions Director and the FACET Project Director. Industry also contributed. Eighteen speakers (ranging from personnel managers to mechanical, electrical, civil, and chemical technicians) represented local industries; all of these speakers were women. In addition, participants toured 15 industries. Students also viewed seven films that focused on women's place in industry.

There was a deliberate effort to take stress out of this summer program. Much of the work was viewed as creative. The students made newspaper bridges to learn about theories implicit in engineering technology; they made kites as an exercise in problem solving. These hands-on types of activities will be increased in future summer sessions.

Support services. Currently enrolled FACET/FACIT students can avail themselves of all the services offered at the college. These support services include counseling, tutoring, outside agency support, and peer support through the Nurture Group. Once provided by college counselors, counseling for female students in the engineering technology programs is now given by the FACET/FACIT staff counselor. Tutoring in mathematics, a service for all TTC students, is especially promoted for female students. Through the college and the project, female students are also referred to outside agencies (for example, Vocational Rehabilitation and CETA).

A significant form of support is the Nurture Group, a monthly meeting for enrolled female students, sponsored by FACET/FACIT. The project's counselor and the Project Director co-lead the group. Discussion covers diverse topics such as women in engineering, coping with men on the job, assertiveness training, anxiety management, effective study techniques, and the Equal Rights Amendment. Female faculty, female employers, female graduates of TTC technology programs, and current enrollees all participate in this consciousness-raising group.

Job development and placement. FACET/FACIT maintains job development through its continuing ties with area industries and its connections with engineering associations. Many of these relationships were initiated by the college placement office and faculty. The Project Director also made herself and the project known to many local employers. Connections with industry continue to be a major thread in the program. Each connection with an employer becomes a potential source of a job for a trained female technician. Fortunately, job development in the Charleston area does not require inordinate effort. The project was created in response to a demand from industry for technicians, and especially for female technicians. This demand still exists.

Since the origination of FACET/FACIT, the Director of Placement and the TTC placement office have played significant roles in job development and placement. The Director of Placement's primary function is to locate jobs; he feels that the "industrial commitment is very important." At the start of the project, he became cognizant of the need for female technicians in industry (at that time he could not provide the female graduates); he subsequently served on the original committee which addressed this need.

However, placement is also often carried out informally. Companies, particularly those that are involved with the program, will call the Project Director seeking qualified graduates. Thus jobs are often developed and participants placed with little effort. Each student is then followed up. The Project Director makes contacts with employing companies, keeping careful records on all participants. She issues a computer printout for those currently enrolled, and a card file on each participant, graduate, and summer student. She even keeps a log on a few women from industry who take courses to upgrade their position and on women who drop out and then return.

Community involvement and support. Comprised of seven women (the majority serving in personnel departments of local employers, one a retired legislator), the Advisory Committee of FACET/FACIT has met twice and provides new ideas and guidance for the program. A number of these women have also talked to FACET students or groups (such as the Nurture Group). In addition to providing guidance input the Advisory Committee increases exposure for the FACET project.

Community support was won at the onset of the project. One of the Project Director's initial duties was to visit employers and publicize the project. Not only did she make contact with administrators and personnel directors, but she also identified role models, women who had successfully filled technician jobs. She also spent inservice time in an engineering firm so that she could talk more easily with employers. Since then, employers have contributed to the summer course (giving tours and speeches) and in the regular program (as participants in the Nurture Group). One employer comments: "Because local industry supports FACET and its parti-

cipants, we willingly offer jobs to graduates of the program." He adds: "Technical education for women itself is important because industry in this community is just beginning and expanding."

In addition to hiring graduates, industry hires current students who participate in the TTC work/study or cooperative education program. In cooperative education, the college instructor supervises the on-the-job training and helps the student to meet his/her objectives. At this time, four FACET students are participating in this program.

Costs and funding sources. From September 1977 to August 1978, FACET/FACIT cost $90,000. In the initial budget, large sums of money were spent for media expenses ($27,000) and travel ($19,000); these can be compared with the $29,000 in that budget allotted for salaries. The current budget has six areas of expenditure: salaries, materials, media, travel, fringe benefits, and evaluation. The latter five cost about $19,000, while salaries cost $47,000; indirect costs absorb about $23,000 of the funds.

Obtaining funds has been the concern of the TTC Director of Grants who has received considerable assistance from the Vice-president of Development. The project was originally funded by the State Office of Vocational Education. In March 1978 it became obvious that the state would offer maximum funding of $15,000 to FACET as an exemplary project, which was not sufficient to run the project. The program felt that it could not approach the college for total funding although the college did pay the Project Director's salary for July and August 1978, and available funds sustained the summer session of that year. During March 1978, a proposal was submitted to the Federal Office of Career Education which has funded the program for the period September 1978 through August 1979.

PROGRAM EFFECTIVENESS

Formal evaluation of FACET is perceived by its Director as the "weakest part of the project." Little money is allotted for evaluation, and one outside evaluation was cancelled to pay for a sex stereotyping consultant.

Yet program effectiveness can be measured in other ways. Of all measures, female enrollment in TTC programs is the most important. From the spring of 1977 to the fall of 1978, female enrollment in the TTC engineering technology programs rose from 6% to 14% of the total enrollment. Over 100 females are now enrolled in the engineering technology associate degree programs. In contrast, of the 132 graduates of these programs in 1976, only one was female.

In the special eight-week summer course, Careers in Engineering Technology, 84 females were enrolled in the summer of 1978. Of these, 34 were eligible to enroll in college in fall 1978; 22 of the 34, or 65%, are planning to study engineering or engineering technology. Nine students dropped the summer program, a low attrition rate.

Student and faculty evaluation is also a measure of program effectiveness. At the end of the 1978 summer program, FACET took a survey of student and faculty participants. Of the 66 student respondents, 47 rated the course "excellent" and 15 rated it "good." Before the course, 17 respondents were planning to study engineering or engineering technology; after the course, 48 were planning to study it, 7 were uncertain, and 10 did not plan to study it. Each activity in the summer course received a hearty endorsement from an overwhelming majority of respondents. Some random comments from the students surveyed include the following:

> "The program was really worthwhile. I enjoyed being able to work with machines. I like doing things with my hands."
>
> "I have complained about getting up in the mornings, but I've realized that I have to give something in order to get something out of it. I would also like to say that I have really enjoyed it and hope that the program will continue, because I have a younger sister who is interested in this type of program, and maybe one day my little girl will become part of this program." (This student had a baby when she was 15 years old. The mother plans to major in engineering technology at Trident in 1979.)
>
> "I really learned a lot of things this summer from the FACET program and it helped me make a decision concerning my future goals. I realize now that engineering isn't as hard as I anticipated and that I can survive in the field."

Of the 10 respondents in the summer faculty who were surveyed, six rated the summer course as "excellent" and four rated it "good." Eight wanted the project replicated and one was against replication.

In its first-year report, FACET was evaluated in terms of its project objectives. The primary objectives call for at least 35 women to be graduated each year from engineering technology programs at TTC and to be hired by local industries, beginning in June 1980. It can now be anticipated that 17 women will graduate in the spring of 1979 and that the goal of 35 will be surpassed in the following year. Followup will be conducted on the employment success of these students. Another objective calls for a permanent emphasis on nontraditional careers for females at TTC. The jump in female enrollment (6% to 14%) reflects an improvement in this area.

Another objective mandates an increased capacity on the part of of TTC to facilitate the transfer of females from high school to engineering technology programs. In the fall of 1978, 16 summer program students enrolled, suggesting such transfer is improving. A further objective specifies the integration of student services and instruction at TTC through the planning and team teaching in the Careers in Engineering Technology summer course. During the first summer course, faculty from three divisions of the college and staff members from the development office and the student services office all helped to plan and implement the course.

Another objective mandates replication of the FACET project in at least two other two-year colleges. Although no college has replicated the project in its entirety, three technical colleges have replicated parts of the program and two more are interested in doing the same. Project staff plan to write an implementation guide to facilitate this process.

Awards are also a measure of success. In January of 1978, the American Association of Community and Junior Colleges recognized FACET as one of six exemplary programs of vocational outreach to women. Of the six, FACET was the most recently developed. FACET was cited as the first of its kind "to address the scarcity of women in the engineering technologies." In addition, its public awareness materials have won local and regional awards.

Staff and TTC faculty see many evidences of FACET's success. The Project Director noted that the enrolled women are surviving academically; in one TTC class, women rank first, second, and third. The dean of engineering technology points to the successful recruitment for the summer course. And an instructor remarks on the increased awareness achieved through the program, calling it "an eye-opener."

PROGRAM FUTURE

As with many such programs, the main problem for continuation is funding. The Project Director has asked for more federal funding; she also feels that the college may contribute, as FACET/FACIT is increasing enrollments in technical programs. She feels positive about the continuation of the project. The President of the college also feels positive about continuation; he is forward-thinking about women's programs. Still, he voices the need for federal refunding. The Vice-president for Instruction recognizes a need for shared funding and for continued participation and support by administrators and staff at the college.

The project is already changing and expanding. "We are refining on the basis of experience." comments the Project Director. In the immediate future FACET/FACIT will continue the high school component, recruit older women for the regular programs, offer night courses to women, make a special counselor accessible to only FACET/ FACIT women, and extend the original project into the academic programs of industrial technology (Female Access to Careers in Industrial Technology: FACIT). The Dean of Industrial Technology feels that the "hands-on" activities of the summer course are a good orientation to disciplines in his technology, and these may be increased.

Although at least one college administrator feels the project could not be improved, others spell out real and potential problems. The Dean of Engineering Technology conjectures about what would happen if a sufficient supply of males were available for enrollment: "How would places be reserved for FACET/FACIT women? Would employers prefer men to women?" The recent gains of women would probably be partially maintained, for trained female

technicians, but the issue of preferential enrollment at the college remains unsolved. The Dean also stresses the need for continued followup and assessment of females in industry: "What jobs are open to them? What promotions are they given? What is their rate of drop-out?"

The Vice-president for Development, who helped to found the project, has a broad view of the future of the project. She feels that the college will support it, but that the college cannot provide transportation, child care, and stipends for persons on welfare. She believes the major focus of the project must be to make women employable. Her proposal for achieving this goal is to get "incentive funding from the federal government. The college as a change agency would be rewarded for what it does--how it can change the lives of women in a given period."

REPLICATING THE PROGRAM

Some deans at the college have remarked on the ease of replicating FACET/FACIT. The project adapts itself readily to the technical colleges set up by the state of South Carolina, but other states or communities with similar types of colleges or with similar technical programs would probably also find the project replicable.

Some recommended steps for replication of FACET/FACIT are:

- Organizing a planning group and planning the project.
- Setting an ultimate goal for the number of female technicians to graduate annually from the technical programs.
- Assessing the use of college resources (such as office space, counselors, placement office services, special services) and appraising the support from the college.
- Acquiring funds (ideally from the college and from an outside source).
- Appointing a project director and orienting her or him to the college and to the business community.
- Launching a public awareness campaign to change attitudes of the community, industry, and prospective students.

- Establishing ties with local employers.
- Recruiting for the summer course (primarily among high school students).
- Selecting students for the summer school course.
- Planning and executing the summer school course emphasizing hands-on activities.
- Arranging for support services for females who enroll in the regular technical program(s). (Organizing a Nurture Group, arranging for counseling, and so on.)

The FACET Project Director highlighted the parts of this sequence that she feels are integral to the successful development of a FACET/FACIT project:

- "A full-time person responsible only for the program... should be physically located with the faculty who teach male-oriented programs."
- "Start small and build on early successes. Always try to incorporate project activities into the existing institutional structure."
- "Two groups should be targeted for exposure to nontraditional careers: girls still in grades 1 through 12 and women who have been out of school for one or more years."
- "An audio-visual presentation such as a film or slide tape presentation which features actual 'non-traditional women' as role models is a real plus when making community presentations."
- "Personal contact with the community through schools and area groups is an excellent way to reach people."
- "Local industries have good resources which they are anxious to use to help in Affirmative Action efforts. They should be utilized to a maximum extent."
- "In exploratory courses, hands-on laboratory experiences should be emphasized and lectures should be avoided. Participants should meet women role models and visit industrial sites."
- "Once female students are enrolled, many may need reassurance and guidance. This service should be readily available."

Dissemination to encourage replication has been active. FACET public awareness materials have been pivotal in this campaign. The project film "Make Something Happen" was disseminated to 34 institutions in 14 states in its first year of distribution. In addition, the Project Director has made presentations to the vocational directors and deans of all technical colleges in South Carolina, and to regional and national meetings. Colleges from 21 states have requested information about FACET/FACIT.

When asked about the secret to successful replication, project staff and faculty offered a variety of responses. The Vice-president for Development again stressed the importance of developing the project on a research base and the necessity of a wide "network of support" (from media, college administration, funding sources, peers, and counseling personnel). The Project Director cited the need for a full-time director. A dean emphasized the need for superior recruitment. Many college personnel felt that FACET/FACIT was both innovative and practical. One administrator noted that the most innovative aspect is the economic advantage offered by the project: "FACET took a stand that technical education is an economic necessity. It's the best thing for women. The project is saying, 'Yes, you have a problem, but economics and you can make a decision to change your situation.'"

CONTACT PERSON AND ADDRESS OF PROGRAM

Alison Y. Caughman, Project Director
FACET/FACIT
Trident Technical College
P. O. Box 10367
Charleston, SC 29411

NON-TRADITIONAL JOB OPPORTUNITIES

Longview, Washington

Longview, Wash. - They wear logger's boots in small sizes. They talk about slacking the main line, and they practice high climbing and choker setting.

Fifteen women--housewives, a college graduate, a high school senior--ranging in age from 18 to 35, are enrolled in a logging class this fall at Lower Columbia College.

This is the first time Warren G. "Swede" Lowe--a logger turned teacher--has taught the basics of logging to women since he started the class 10 years ago.

When local industry indicated an interest in hiring women for logging-related jobs in management and the woods, Lower Columbia initiated the 18-credit course.

Last week, the class got a taste of real logging. "We got one load of logs out," Lowe said. "I felled the trees, they did the rest."

And with pride, he said, "I have kids (former students) who are donkey punchers, loader operators, timber fallers, riggin' slingers. Guys like to hire my students because they don't have to teach them much."

The Portland Oregonian
Permission to reprint granted.

PROGRAM OVERVIEW

The above newspaper article describes one newly designed course now offered by the Non-Traditional Job Opportunities (NTJO) program at Lower Columbia College in Longview, Washington. Among the CETA-sponsored program's other offerings are a Preparation for Sawmill Employment class, consisting primarily of intense physical conditioning, and an Industrial Experience class, which provides hands-on experience in a variety of vocational areas. The NTJO program, as part of the Women Studies Program at the college, assists low-income women in obtaining jobs historically held by men.

Two major strategies are used to enable women participants to obtain nontraditional jobs: (1) job readiness assistance, and (2) development of jobs and/or training experiences in cooperation with other agencies and resources. The majority of program enrollees engage themselves in this

process by taking the 12-credit Non-Traditional Job Orientation class which is the core offering of the program. This class, in concert with the program's continuous individualized counseling plan, provides each woman participant with realistic expectations and job-getting skills for exploring nontraditional careers.

The following observations of NTJO enrollees and graduates typify the experiences of many:

> "After my divorce I needed a job with good pay to support my three kids. I hate welfare and I just wasn't making it as a waitress and barmaid."
>
> "At first they make sure you're really interested. . . . then they really help you build up your confidence."
>
> "They gave me real answers, things that were feasible . . . things to learn about myself . . . The best part was having other women there with the same problems. It was O.K. to say 'I'm scared'."
>
> "I sure wish I had this in high school nine years ago. They should give it to all high school girls."

PROGRAM BACKGROUND AND DEVELOPMENT

The Longview area of southwestern Washington can boast of the highest per capita income in the state. This is partially attributable to the fact that a large, well-paying lumber industry dominates the economy of the area. The jobs these employers provide, while unquestionably high-paying (entry-level sawmill work begins at approximately $7/hr.), are nevertheless very traditionally male-dominated occupations. The few attempts of women to break into these unskilled, physically taxing, and oftentimes "swing" and "graveyard" shift jobs have not met with success. The high per capita income of the area, then, only exacerbates the problem of the already wide gap between male and female incomes.

A relatively high percentage of single female heads of households in the area serves to emphasize the need for better-paying job opportunities for women. Particularly needy are those disadvantaged, undereducated,

unemployed, and underemployed women who, if not already dependent on some form of public assistance, have typically had to rely on traditionally female, "dead-end" jobs, such as secretary, nurse's aide, and waitress. These low paying jobs provide very little incentive to a single mother to become less dependent on welfare, especially when working at a job of this type poses the additional burdens and expenses of transportation, child care, and health care.

In the early 1970's the administration of Lower Columbia College began to recognize these special needs of women. In 1974 a woman was hired for the primary purpose of increasing the female enrollment at the college and promoting and addressing women's issues both at the college and throughout the community. She established liaisons with various agencies and groups and investigated programs at other institutions, especially the CETA-sponsored "Work Options for Women" project at the Olympia, Washington YWCA. Her efforts eventually resulted in the submission of a proposal to the state CETA agency which proposed Lower Columbia College as contractor for the Non-Traditional Job Opportunities CETA grant. The initial grant began in June 1976 with three staff members--a secretarial/intake program aide, a Job Counselor/Developer, and the Project Director. The program is currently in its third year and has added a second Job Counselor/Trainer to its staff.

Since the program's inception over 200 women have been enrolled. Each time the 12 credit-hour course has been offered, the enrollment, completion, and placement rates have grown. Over 80 percent of the women completing the course have been placed in a job or have continued into formal vocational training or apprenticeship programs. Approximately 60 percent of the women have chosen nontraditional fields for employment or further training. Women have found jobs in a variety of fields, including work as truck drivers, sawmill laborers, forest workers, maintenance helpers, auto parts salespeople, meat wrappers, custodians, landscapers, and utility meter readers. The first woman chosen in Washington and Oregon as a floor covering apprentice is from the NTJO program. "Graduates" of NTJO are also in tile setter and sheetmetal apprenticeships. Three women have been chosen for the Teamsters Driving School and are successfully working in that occupation. Many women are also receiving training in a variety of tradi-

tionally male fields, including mechanics, construction technology, machinist, auto body, and welding.

The commitment of the Lower Columbia College administration to women's issues in general made the establishment of the NTJO program at the college a relatively smooth process. The only real barriers to implementation are the somewhat restrictive financial, administrative, and eligibility requirements imposed by the federal CETA agency. The college and the NTJO program have, nevertheless, been able to broaden the target population served by offering several adjunct or supplementary nontraditional training programs--namely, Sawmill Preparation, Forest Products Harvesting (Logging), and Industrial Experience--to other interested and motivated women, in addition to CETA-eligible women. In accord with the terms of the CETA contract, however, the core of the program, the 12 credit Non-Traditional Job Orientation course, is open only to those women who qualify for CETA funds. To be CETA-eligible, the women must be at least 18 years old, economically disadvantaged, and unemployed, underemployed, or head of households with dependents.

Goals and Objectives

The Non-Traditional Job Opportunities program embraces the following goal: to assist low income women living in Cowlitz and Wahkiakum counties (southwestern Washington) in entering jobs that have been traditionally held by men and to provide an adequate wage, benefits, and upward mobility. Major objectives are to prepare women for the realities of a job before they are employed so that they can make realistic decisions, and to train people for jobs that actually exist and that meet the needs of community employers.

The project staff addresses these goals and objectives in the following ways:

(1) By making low-income women aware of the advantages of nontraditional jobs, and the opportunities available to them;

(2) Through assessment of interests and aptitudes, to help enrollees make realistic choices;

(3) Providing job-finding skills and techniques, building confidence, and identifying skills through counseling on an individual and group basis;

(4) Through job and/or training development, to open the doors for enrollees to apply or receive the necessary skill development needed for occupations of their choice;

(5) Work with local industry to develop special programs, such as physical fitness and hands-on industrial experience, that provide a number of jobs in areas previously closed to women; and

(6) Follow up on the progress of each enrollee.

Project Organization

The NTJO program is housed within the Women Studies Program at Lower Columbia College. As such, it shares the Women Studies Program's community-based Advisory Committee, which includes representatives from the Department of Employment Security, the Department of Social and Health Services, Lower Columbia Community Action Council, labor, management, and minority groups. These individuals serve as valuable coordinating links between NTJO and the community. Coordination with the college involves close cooperation with its more than 40 ongoing occupational programs, at least 15 of which are nontraditional for women, including auto mechanics, auto body, mechanical engineering, law enforcement, and welding.

Soon after the NTJO program began, the college felt it wanted to increase the visibility and add to the credibility of the NTJO program and its Project Director. The administration of the college believed that the goals of the program were of such worth that they should be broadened to include all interested women, not only those that are CETA-eligible. With that end in mind, the college supplemented the Director's salary with some of the college's vocational education funds and made the position into a regular faculty position (Industrial Education Coordinator). In addition, she became the Affirmative Action Officer of the college, reporting directly to the college president. By broadening the duties of this position, the NTJO program can now more easily draw upon and share the resources of the entire college, rather than be treated as a separate project.

PROGRAM DESCRIPTION

Target Population and Setting

Longview, Washington is an industrial town of approximately 30,000 people on the banks of the Columbia River in the rural, southwestern corner of the state. Its economy, as previously noted, is dependent upon a handful of large sawmills, paper and pulp plants, various wood product mills, logging companies, and two plants of Reynolds Metals. The welfare of this highly unionized area is consequently very sensitive to economic ups and downs in the lumber and related industries. These large employers are, with the advent of Affirmative Action legislation and enforcement, particularly eager to cooperate with programs such as the NTJO program at Lower Columbia College (LCC).

The college itself is part of the state system of 22 independent community college districts. LCC serves two counties whose combined population is approximately 75,000. The college offers a variety of two-year degrees, transfer credits to four-year institutions, and Certificates of Completion for career and vocational students. LCC admits all students who may benefit from the various courses and programs offered by this "open door," low-cost college. Fall 1978 enrollment figures show 3,665 total students, 45% of whom are in various vocational programs. The proportion of female students has now grown to approximately 57% of the total student body.

The NTJO program assists low-income women who are unemployed, underemployed, and disadvantaged as defined by the CETA agency. Enrollments in the CETA-sponsored portion of the NTJO program for the period July 1976 to Fall 1978 show most of the participants (84%) to be in the 20 to 44 age range. Ninety-four percent of the enrollees are white while 3% are Native Americans. Sixty percent of the women have graduated from high school and 10% have had some previous college experience. Half of the enrollees are recipients of public assistance. These figures do not include women who have taken the supplementary special programs, such as Sawmill Preparation and Logging, unless they also are CETA-eligible and enrolled in the Job Orientation course.

Program Staff

It goes without saying that the staff of a program like NTJO must have a deep commitment to the goals of the project as well as to women's issues in general. The program at LCC has additionally found that a direct knowledge of labor and industry is more important than a more traditional counseling and psychology background. The three Job Counselors that have served the project to date, as well as the Project Director, have all had a strong background in industry, employment, labor, and/or apprenticeships. One Job Counselor came to NTJO directly from the State Employment Security Department. Another has a background in construction management. There has been no degree requirement of the Job Counselor position.

One current Job Counselor summarized the commitment and hard work demanded by the job:

> "The staff must be oriented to nontraditional work for women. She must do outreach, she must do selling of the program. She must directly sell an applicant to an employer. She is an advocate. She must meet employers, go to union meetings, apprenticeship meetings, see personnel managers. She has to try to make it (Affirmative Action) less painful for employers. It's important to keep your credibility with employers... You have to be willing to do whatever you have to, whatever has to be done to make it work."

There is an interesting anecdote regarding the program's first job counselor/developer. She says she was always a "tomboy" and enjoyed working more with her hands and body than only with her mind. She came to the program, she says, "well versed in sexism" and had had much experience applying for positions in nontraditional areas. Soon after she joined the program as Job Counselor/Developer she realized she wanted to "practice what she preached" one day. Today she is one of two Portland female sheet-metal apprentice trainees (the other is also an NTJO "graduate"), and one of a handful of women in the Northwest who has succeeded in entering an apprenticeship training program of any kind.

Program Facilities

The NTJO program relies on the cooperative relationships it has established with other groups for in-kind contributions of facilities and equipment. Classroom space and office space for the program's staff are supplied

by the college. The Sawmill Preparation course, which primarily consists of physical conditioning, uses several instructors and the facilities of the college's physical education department. A Universal Gym weight training center, gymnastics apparatus and practice areas, and athletic fields are used by Sawmill Preparation students.

The Logging class is offered to NTJO women at a local high school. The class uses a large classroom and adjacent garage for instruction at the school and for the housing of a considerable amount of equipment, including power and cross-cut saws, axes, mauls, a skidder, chokers, boots, hardhats, and other safety equipment. The class also uses a large school bus for transporting the students and equipment to many practice work sites in the surrounding forrested areas.

The Industrial Experience class provides hands-on work experience in a variety of vocational education areas. In doing so it shares the college's shops, tools, equipment, classroom facilities, and instructors from regular vocational classes in auto mechanics, machine shop, construction technology, electronics, replacement parts, and welding.

Other facilities of the college are made available to NTJO students as they are to all students, including math and reading labs, tutoring services, libraries, and the counseling center. In addition, each of the NTJO-sponsored classes offers occasional job site tours to several large local employers. These employers donate their time and the use of their facilities for these half-day tours.

Program Activities

Recruitment. Women are recruited from Cowlitz and Wahkiakum counties by utilizing many avenues of communication, including newspaper articles, radio public service announcements, posters, brochures, flyers, a project newsletter, workshops, career and job fairs, and other oral presentations. One Job Counselor says she will even occasionally canvas pool halls and similar places to recruit students. A survey of former enrollees has indicated that, clearly, the two most successful methods of recruitment have been word of mouth via friends and "graduates" of the program, and the

following simple newspaper ad, which is periodically run in various forms in the local paper:

> 550 Help Wanted--Misc.
>
> TIRED OF low paying dead end jobs?
> Low income women are invited to
> explore higher paying nontraditional
> jobs. LCC, 577-2393.

A close liaison has been established between the NTJO staff and virtually all community agencies to refer target population women to the program. Women role models who are presently engaged in nontraditional work or training are used whenever possible. Contact is made with LCC faculty and staff to locate women who are graduating and seeking employment. Workshops are held on and off campus on various aspects of nontraditional employment. A typical workshop was entitled "Women in Trades" and attracted over 50 women.

Potential participants reached through recruitment efforts initially make contact with the program aide, where individual assessment begins. It is determined at that point whether the participant is eligible for the CETA-funded portion of the NTJO program. A client is certified eligible if application information indicates that the applicant is economically disadvantaged, is a public assistance recipient, a veteran, unemployed, or underemployed. Upon enrollment the applicant fills out and signs a form which certifies financial status and reports all sources of income. Eligibility is also dependent to a large extent upon nontraditional employment interests even after financial conditions are met. If another agency or program is deemed to be better suited to help the applicant, then the applicant will be referred there.

Once a person is certified eligible, an assessment process begins which involves a careful probing of a woman's nontraditional interests and aptitudes. This is done by discussing personal goals and the realities of nontraditional work. Often interest and aptitude tests are given to help identify potential careers. The Computer Information Center at LCC is sometimes used, and the Self-Directed Search by John L. Holland is often

administered during the counseling process. The General Aptitude Test Battery (GATB) can be administered by the state's Employment Security Department and the results used by NTJO and the client. The Job Counselor and Director of the Counseling Center at LCC discuss the results with the participant.

During the assessment process, any educational deficiencies are identified. If appropriate, the participant is advised regarding the steps required to complete a GED program (Graduate Equivalent Degree, leading to a high school equivalency diploma). The Key Center (tutoring) and Math Lab of LCC may be incorporated into the client's job preparation plan. Physical fitness courses prepare students for the physical requirements of some jobs.

Instructional programs. The flexibility of the NTJO program is such that as employer needs change, as the economy of the area shifts, and as the needs of prospective employees alter, NTJO can adapt and diversify its offerings to meet these varying needs. Over the past several years, NTJO has offered four basic instructional programs. Each will be discussed in turn.

1. Most enrollees attend the core "Non-Traditional Job Orientation" class, a 12-credit course that is offered every five or six weeks. Classes meet three times a week. All women entering the program must attend the first two introductory classes, which total four to five hours of class time. These orientation classes explain the scope of the program and help to screen out women who are not particularly motivated to pursue a nontraditional career. The balance of the classes includes a wide range of activities, such as confidence building, assertiveness training, goal setting, interviewing techniques, job-searching skills, career exploration, values clarification, skills assessment, resume writing, hiring practices, job bidding systems, and apprenticeship information. Speakers are used from various community agencies and local employers. Tours to industrial plants are conducted. Women working in nontraditional fields are asked to participate whenever possible. The primary objective of all these activities is to give participants realistic expectations about nontraditional vocations.

The program's job counselors get increasingly involved with each student after the first several class sessions. At this time the process of refining job goals is begun. An "employability plan" is developed as required by CETA guidelines. As barriers to entering nontraditional fields are identified, the job counselor and student seek to overcome these problems. The problems are many. Women frequently lack knowledge of a job's requirements. Many do not realize it may be necessary to change tires and install batteries for weeks and months on end before they will be trained to do other mechanic's jobs. Women who want to be carpenters may not know they will probably hammer eight hours a day for weeks, get painful tendonitis, and get very bored. Within the scope of the NTJO core class, the program requires that each woman fully investigate the jobs or career area she is seeking by talking to people in the field, visiting job sites, and learning the hazards and physical requirements. One woman within the program who wanted to be a cement mason developed a 30-page research paper on what the trade involved. During the apprenticeship interview she was able to demonstrate interest and knowledge of the trade. She was accepted as an apprentice.

2. A second instructional program that has been offered by NTJO is Industrial Experience. This training program is intended for women who have had no previous experience working with tools, have not taken shop classes in high school or worked in a trade. The enrollee receives hands-on experience, learns the vocabulary of the trade, its physical requirements, uses the tools and equipment, and explores job opportunities in one or all of the following: auto mechanics, machine shop, construction technology, drafting, electronics, replacement parts, welding, and woodshop.

The course is divided into modules so that a woman can receive as many as ten credits during the term. A two-credit Industrial Environments Module is required of all enrollees. Among other topics covered is that of psychological readiness for the stress of working in the trades. Another focus is to promote awareness of "math anxiety" and work on math review, and to become aware of one's personal reading level for comprehension of technical manuals.

3. A third instructional program that was instituted recently by the NTJO program is the Forest Products Harvesting (Logging) class. In the normal process of job development for enrollees of NTJO, it was soon discovered that there were no women in the logging and woods jobs of the two major logging companies in the area. Reasons given were that only a few women had applied, and of those who did, none had suitable backgrounds for entry-level jobs, such as choker setting. Goals for hiring women for the woods jobs had been set in Affirmative Action plans for both companies. Because they were having difficulty meeting those goals, discussions ensued regarding the types of problems women faced in these jobs. Tours were set up for NTJO and other LCC staff to visit the job sites, view all the jobs, and meet with the company safety supervisors to determine a suitable training program.

It was discovered that there was already a logging class being taught half-day at a local high school which had been successful in training high school boys for entry-level woods jobs. The instructor and school district were contacted regarding the possibility of a class just for adult women. Eventually, it was decided to contract with the high school for the instructor's time and the facilities and equipment of the class for the other half of the day. The women's class is purported to be the first of its kind west of the Mississippi.

This recently instituted, 18-credit Logging class meets for 3 hours five days a week for one semester. If an enrollee is CETA-eligible, the cost of the course is paid by NTJO or other sources of financial aid. Otherwise, any woman may take the class for $103.00 tuition.

Students in the Logging class spend much of their time outdoors getting hands-on experience at actual job sites in the woods. They learn splicing techniques for mending broken cable, hand and whistle signals for high-lead tractor and skidder loggers, highclimbing trees, choker setting, crawler tractor operation, power saw operation and maintenance, theories and principles of falling and bucking, scaling and grading of logs, history of logging, and logging terminology. The class actually does some private contract logging work that helps purchase new equipment as well as provide

realistic training. The class is monitored closely not only by the college but by the logging industry. Both want it to succeed.

4. The other instructional program that has been designed through NTJO is the "Fitness for Employment" course or, more recently, the "Preparation for Sawmill Employment" course. Two large local employers were having difficulty finding and retaining women able to work in entry-level jobs in their sawmills. These jobs are usually "pulling green chain," sorting timber, and cleaning up around conveyors--all very physically demanding jobs. Many women have had an unrealistic view of what sawmill work is like and have not recognized the need for physical readiness and stamina. The few women that had been placed quit after a few days because their muscles were "screaming." They had not realized it takes at least one or two months to become conditioned. An agreement was made with NTJO to design a program that would train women mentally and physically for the strenuous sawmill jobs that were available.

The NTJO staff and the physical education instructors at LCC toured the mills to observe the jobs. Instructors learned which muscles a person used and the specific stresses and strains on the body working on each job. They also spoke with the plant nurses to learn what injuries are more prevalent with female employees. An individualized course in physical fitness, with emphasis on upper body strength and endurance, was developed. A special pulling apparatus which simulates lumber pulling was purchased by the college. Activities include swimming, running, and calisthenics three days per week and work on the Universal Gym to develop arm and shoulder strength the other two days per week.

Within the program women work on attitudes toward physical work and developing psychological determination. Special class sessions on union regulations, management, first aid training, safety, job applications and practice interviews, benefits, seniority, and upward mobility are conducted by company personnel and NTJO staff. Student tours of the sawmills are held. During the course of the program each student is interviewed by the personnel department of the sawmill of her choice and also receives a physical exam by the company. If the applicant passes the company physical

and can demonstrate high motivation for obtaining sawmill work, the sawmills have in the past been able to promise these women jobs upon completion of their physical training programs. This promise of a job has been dependent on favorable employment conditions at the sawmills. Therefore, the class is scheduled around job openings at the mills.

The sawmills have helped recruitment by referring female applicants "off the street" to the NTJO program. One sawmill employer reports that all women that have gone through the sawmill class at LCC have been able to handle the initial physical requirements of entry-level jobs.

The Logging and Preparation for Sawmill Employment course are examples of the offerings that can be designed as long as a program remains flexible and responsive to the needs of employers. As a consequence of the publicity and success of these two courses, the NTJO program has recently been approached by personnel from the local aluminum plant and from a nearby pulp and paper mill regarding the development of similar courses that might help them meet their Affirmative Action goals.

Support services. The enrollee's main link to the various support services provided by the NTJO program and the college is through the continuing counseling process that has been mentioned previously. The counselor matches the enrollee's interests and aptitudes with the requirements and conditions of the occupation. When a realistic job area is chosen, short and long range goals are identified and a plan of action is developed.

This "employability plan" is developed by agreement of enrollee and counselor. Some activities that may be included in an employability plan are completing a GED program, talking to a person working in the chosen field, applying for a job, recontacting an employer, taking the GATB, researching an occupation, taking a course to upgrade skills, or investigating long range CETA programs available through the local CETA Center, such as On-the-Job Training, Individual Referral, or Work Experience.

During the individual counseling process an attempt is made to identify and help overcome potential barriers to the client's job training, placement,

and even job retention. These barriers might include low self-esteem, transportation difficulties, child care needs, physical limitations, mental health problems, and peer or family pressure about job choices. CETA grant monies can help with child care and transportation costs, tuition assistance, dental or cosmetic needs, special clothing, and "tools of the trade." Individual and group counseling address personal issues, such as fear of success and lack of confidence.

The NTJO counselors also act as a liaison and referral link to community agencies. These include the local CETA Center, Employment Security Department, Department of Social and Health Services, Department of Vocational Rehabilitation, Lower Columbia Community Action Council, Mental Health Center, along with Joint Apprenticeship Committees, labor unions, vocational advisory committees, the Chamber of Commerce, service clubs, women's organizations, minority groups, high school counselors and Portland Area Apprenticeship Coordinators.

Job development and placement. Activities in this category are intended to serve not only the needs of enrollees, by providing jobs, but also the mutual needs of the project, by successfully placing participants and maintaining the project's credibility, and the needs of employers, by assisting them in meeting their Affirmative Action goals. In seeking job commitments from employers, a continual effort is made to solicit their input regarding job requirements and realistic training needs. A close working relationship is maintained between the NTJO staff and leaders in industry, labor, and apprenticeship in order that this realistic framework for training and placement continues.

The job placement process often involves direct personal contact between the NTJO job developer and potential employers. The job developer will canvas prospective employers to introduce the NTJO program and to learn whether the employer is interested and appropriate for the program. When the job counselor and enrollee together decide that it is time to begin applying for jobs, the counselor may personally contact employers on behalf of the applicant, acting as an advocate for the student until a personal interview is arranged. Then the counselor encourages the student and helps to build her confidence.

Contact is made with all women in the program at least once a week. Their progress is checked regarding employment contacts made, job interviews attended, exploratory visits to job sites, problems encountered, and additional services needed. After a woman obtains a job, there is continuing follow-up on her at least twice monthly with special attention paid to work conditions, job requirements, training being received, undue stress, harassment, and any other conditions that may pose a potential problem. Three-month and six-month follow-ups are also done on all women who have gone through the program, according to CETA requirements.

Costs and Funding Sources

NTJO's initial grant in 1976 of approximately $54,000 supported three full-time staff members in addition to costs of equipment, supplies, communications, training, and participant supportive services (tuition, day care, transportation, books, special equipment, tools and clothing needs, and so on). The program's grant grew to approximately $65,000 in 1977 and to approximately $70,000 in 1978. In 1977, the program was able to add a second job counselor/developer to its staff. At the same time, a smaller portion of the Project Director's salary is paid out of CETA grant monies, as the college has been able to pick up the difference while expanding her duties. It should be remembered that the CETA grant covers only the 12-credit core NTJO course and the attendant administrative, counseling, and job development functions of the staff. The costs for the Sawmill Preparation, Logging, and Industrial Experience classes, while part of the overall NTJO program, are handled by the college as regular classes that the college offers. Arrangements may be made through CETA to help eligible women with the costs of these classes.

Changes in attitude on the part of employers and changes in self-esteem on the part of "graduates" of the NTJO program are difficult to measure in dollar amounts. One gross measure of cost-per-placement was estimated at approximately $700.00. This calculation does not account for those graduates who continue into further training. It also does not measure other beneficial, yet intangible, outcomes. Additionally, the $700.00 figure does not reflect the savings to the state for public assistance payments that are foregone or for the increased amount of income and other tax money collected as a result of gainful employment of many NTJO graduates.

PROGRAM EFFECTIVENESS

Over the years, a variety of quantifiable measures of program effectiveness have been made by NTJO program staff. Among the more significant measures are the following:

- Over 70% of the women entering the program have been placed in employment or training; 60% go into nontraditional jobs.
- Over 80% of those women enrolled complete the program. Of these, 80% are employed. Each year enrollment, completion, and placement totals have grown.
- The average wage is $5.46/hour for women who completed nontraditional training programs last year. In August 1978, the average nontraditional wage was $6.25/hour as compared to $4.11/hour for traditional employment.

Other less quantifiable measures of program effectiveness include:

- Demand for the program is outstripping its ability to assist applicants.
- The LCC Administration feels the program increases the college's positive image in the community.
- The project has received national recognition and has been considered a model for other programs.
- Employers report that women who have shown the determination to stick with the rigor of NTJO courses and complete their training come to their companies better motivated.
- One Job Developer had this to say about program effectiveness:

  "I've had women tell me, 'I've never been happier in my life.' ...I'm always getting 'thank-you' letters. ...One time I was sent a dozen roses as a thank-you from a woman who got a job.... In the PE program, one woman lost 50 pounds in three months."

PROGRAM FUTURE

Prospects for continuation of the NTJO program appear to be excellent. Of course, events beyond the control of the program, the college, or the

local CETA Board, such as economic depression (no jobs), political change (end of CETA funding), or the loss of key program staff, could terminate the program regardless of its successes. One NTJO staff member put it this way: "We've done too much for their image." A local CETA Board member reported a feeling of "genuine dismay" on the Board when they realized that continuation of the program after its first two years was dependent on a competitive, open-bidding process. Fortunately, there were no proposals in the state that competed with NTJO.

To be sure, the Project Director would feel more secure if the program could obtain more "hard" money, rather than its current year-to-year funding. While it is unclear whether the college could take over the entire program if CETA funding were to end, that is viewed by many as a move that would allow the program to expand to meet the needs of all women. One college administrator would like to see the college train women for nontraditional professional occupations. One employer at a sawmill admitted that he would like to see a preparatory program for men in sawmill employment. Another college administrator speculated that "the college can't let this (NTJO) die," pointing to the guiding premise of LCC that the college must be responsive to the needs of the community.

REPLICATING THE PROGRAM

The only "external" condition that might affect replication of the NTJO program at another site is the fact that the Longview area served by LCC is heavily industrialized. The economy of the area is dependent upon a few very large employers who provide a large number of relatively high-paying, unskilled, and semi-skilled jobs. At the same time, these employers are subject to Affirmative Action legislation and are particularly open to hiring qualified women for entry-level jobs that traditionally have been held by men. Even though the job market is subject to economic fluctuations, it is nevertheless critical to the success of a program like NTJO that the promise of a job at the completion of training can be made.

Following is a listing of significant features of the Non-Traditional Job Opportunities program that observers and participants feel are essential to the success of the program. While it may not be true that an institution wishing to create a program similar to NTJO follow each of these guidelines, each item in the list does reflect the viewpoints of at least several people associated with NTJO, Lower Columbia College, or various community agencies and groups in the area.

- A goal of NTJO is not to "coerce" or "push" women into nontraditional careers, but rather to provide realistic expectations to those women who are so motivated.

- Being attached to an established, supportive community college lends to a fledgling program a sense of professionalism and legitimacy. It is much more difficult to combat a potentially negative "social worker image" if attached to a less stable community agency or group. Also, the range of support services provided by a community college is difficult to duplicate elsewhere.

- Rapport with the sponsoring institution is a valuable asset to a program. By establishing the Project Director of NTJO as a faculty position rather than as a CETA classified position, the administration gave her more freedom to move and to be visible throughout the college.

- The ongoing continuous counseling process that follows a woman beyond her termination from the program was mentioned by many students as being extremely helpful and supportive.

- A cooperating network of community agencies, in which each agency can help the others meet their various goals, can create economies of service and avoid duplication of effort.

- It is essential to maintain flexibility in the courses and training offered by always remaining responsive to the needs of individuals, the community, and especially employers. The promise of a real, existing job upon completion of training is better than the promise of more training.

- The importance of federal Affirmative Action regulation cannot be overemphasized. It is questionable whether large business and industry would be nearly so cooperative if it were not for Affirmative Action.

- In order to maintain credibility with employers, it is important to thoroughly screen enrollees and applicants to ensure that they are highly motivated to pursue a nontraditional career.

- The importance of carefully picking one's staff cannot be overemphasized. In addition to being highly committed and dedicated to their task, the NTJO staff feels that their backgrounds in industry, labor, and apprenticeship have been invaluable in developing a rapport with the employer community.

- Lastly, care must be taken in choosing leaders for a program. A militant or strident personality, while perhaps well-meaning, may cause more harm than good. One of the most often-mentioned characteristics of the NTJO program was the hard-working determination on the part of the Project Director and especially her ability to relate easily with diverse groups of people.

CONTACT PERSON AND ADDRESS OF PROGRAM

Ms. Fran Chaffin
Project Director
Non-Traditional Job Opportunities
Lower Columbia College
1600 Maple
Longview, WA 98632

WOMEN'S DEVELOPMENT CENTER

Pewaukee, Wisconsin

PROGRAM OVERVIEW

"How does one develop a sense of purpose?" "How does one find a job after many years of unemployment or no employment at all?" "How does one develop the courage and skills to make desired changes?" "How does one enter a career that has been traditionally closed to them?" "Where can one get some help to feel better about themselves?" These are all questions addressed by the Women's Development Center (WDC) at the Waukesha County Technical Institute (WCTI), Pewaukee, Wisconsin. The institute is one among Wisconsin's 16 Vocational Technical and Adult Education districts. It is a multipurpose institute with emphasis on providing its citizenry with occupational education and training opportunities. The idea of the Women's Development Center is to help women and men in transition to examine various alternatives in their lives. Although the focus is on the needs of women, the services are also available to men of the community, and several have participated in group sessions, special conferences and seminars, and in the individual counseling program. "If men perceive any part of the program as valuable to them, they are welcome to attend," a recruiter/counselor explained.

As one key institute administrator put it, "WDC is just plain good educational practice. It actualizes the philosophy of the institute--to serve not only the educational needs and interests of the student population, but the entire community and district as well. We know the need is there. We see more and more women coming into the institute who need assistance and positive direction."

The purpose of the Women's Development Center is to provide counseling and advice for women planning to begin or to resume their education; to coordinate information on educational and training opportunities in the area; to explain career and job opportunities for women, particularly in

fields traditionally closed to them; and to organize discussion groups concerned with problems of special interest to women.

The success of the Center is evident through several measures. During its first two years of operation approximately 5,000 women participated in one or more of the activities provided by the Center. Female enrollments have increased in occupational training programs such as electronics technology, mechanical drafting, industrial safety, and police science. Among 104 clients completing the center program, 93% met their stated goals. One-hundred percent of those clients indicated on a written questionnaire that they would recommend the program to others. Seminars and activities have been rated positively, with pre/post attitude surveys showing participant increase in feelings of optimism and self-esteem.

The Director of the Institute, among many others including participants, claims that the key to WDC's success is the staff. "Like most people in vocational education, we are looking for people who can do the job--not just those who hold degrees. We need to make better use of men and women who have tremendous talent. The WDC staff is a good example of this. They are a committed, hardworking, capable group of people who really care for, understand, and respect their clients."

Three ingredients--a highly motivated and capable staff, a diverse and stimulating program, and community outreach--are among the most important factors making the Women's Development Center successful. There is one problem, however. Too many people want to get in, and the Center is outgrowing its space and staff.

PROGRAM BACKGROUND AND DEVELOPMENT

The idea for the Women's Development Center was born in 1973 after the Assistant District Director of Student Services of WCTI attended an educational convention in St. Louis where a special presentation on women's programs was held. According to this administrator, creating a women's center "seemed like a sensible thing to do, and an opportunity for Waukesha

County Technical Institute to respond to its female district residents by implementing and expanding the concepts of career education." Other institute administrators supported the WDC concept.

A pilot program was designed and implemented in the summer of 1975 to offer special counseling services to women who wished to return to school or to enter/re-enter the work force. The response of District residents indicated a need for the services. Subsequently, a formal program proposal was written and submitted for vocational education funding, and funds were allocated for the school year 1976-1977, and what was then called "the Women's Bureau" came into being. In November of 1976, a staff counselor was hired as a part-time director, and organization and planning began in earnest.

During the first two months (December and January) of WDC's operation, group and individual counseling were provided on a limited basis. By February additional staff were hired, the program expanded, and it became known as the Women's Development Center (WDC). From December of 1976 through February of 1977, WDC operated on a part-time basis only. Since March of 1977, the Center has been providing services on a full-time basis, including evenings and weekends. It has served over 5,000 people to date, through individual counseling, seminars and workshops, speeches and conferences, classes, group counseling, referrals to other agencies, and referrals to employers. Most clients have been women, generally from 25 to 54 years of age, over half unemployed, and typically with a high school education or a little college.

An important part of the original planning process was a visit to nearby Gateway Technical Institute, which was already operating a "Women's Bureau." "The fact that there was someone nearby who had the experience of developing a service program for women in a similar setting was very helpful during the initial planning of our program," reports the WDC director. In fact, Wisconsin has established a women's center program in four other districts. Project Share, initiated by Waukesha's Women's Development Center, contributed to this. Project Share was a short-term project designed to explain and demonstrate to interested personnel in other technical

institutes the essential aspects of a women's center. Although it has ended now, an informal network of assistance and communication has been established among the centers. This has forced far fewer individuals to "reinvent the wheel" to get their center programs started.

PROGRAM DESCRIPTION

The Women's Development Center established a set of objectives on which to base the development of the program. These include:

- Provision of information service to the community on women, minorities, and career and educational opportunities, and counseling services.
- Sponsoring of workshops and seminars where a client may learn about career options and gain self-awareness of her abilities and her role in modern society and the world of work.
- Provision of vocational guidance and counseling services which focus on the occupational needs of women of all ages, especially as they relate to employment opportunities in the Waukesha County Area. The counseling services focus upon the unique concerns and needs of the adult woman and provide long-term counseling support as she attempts to meet her goals.
- Provision of assistance in educational development, vocational training plans and supportive counseling for the woman entering a nontraditional career to help her deal with sex-role stereotyping and human relations problems.
- Establishment of cooperative relationships with public and private employers in the community and assistance in their understanding of the roles of women in the work force.
- Provision of information on the special needs of returning women students in order to ease their transition into the educational world.
- Provision of workshops and group activities for men and women to aid them in understanding the changing roles of men and women and how to cope with them.
- Provision of assistance to area high schools in designing programs concerning sex-role stereotyping and socialization.

Target Population

The WDC program is designed primarily to serve the women in the large community of Waukesha County and any student attending or wishing to attend WCTI. Waukesha County is located between Madison and Milwaukee and is considered generally by school personnel as a middle- to upper-middle-class suburban area.

Although the Center may serve anyone in the County, male or female, from ages 16-101, attending or not attending WCTI, 98% of its clients are female, and the majority (59%) are from 25 to 44 years old. Many are suburban housewives, often underemployed or unemployed women seeking help with lifestyle changes. A profile of recent clients participating in the individual counseling program is provided in Figures 1-4. This profile is representative of participants and clients in all WDC programs in terms of age, education, marital status, and income. It should be noted that many people do not enroll in a complete program at the Center but prefer to participate in individual activities such as occupational opportunity days, and special conferences and speeches. The WDC staff also emphasize that services are free and are available to all persons, not just those in the county of Waukesha.

Program Staff

The WDC staff began with a part-time Director. Presently the staff includes a full-time Director, three Recruiter/Counselors, six Group Process Specialists, and two part-time secretaries/assistants. Each staff position has an official job description which explains its qualifications and major duties and responsibilities. Figure 5 presents an organizational chart for WCTI, showing WDC's position in the Institute.

Program Facilities

The main campus of the Waukesha County Technical Institute in Pewaukee is a six-building complex consisting of the Business Occupations Building, an Educational Resource Center, the Health Occupations Building, the Student Commons, the Industrial Occupations Building, and a heating plant. The Women's Development Center is located on the main floor of the Student Commons near the cafeteria, publications office, and student activities

Figure 1. Age groups of participants in the Individual Counseling Program, December 1976 - June 1978

Age groups	N = 650 #	%
under 25	112	17
25-34	191	29
35-44	196	30
45-54	128	20
over 54	23	4

Figure 2. Educational level of participants in the Individual Counseling Program, December 1976 - June 1978

Education level	N = 650 #	%
1-8	8	1
9-11	56	9
High school diploma	295	45
1-2 years of college	149	23
College degree	142	22

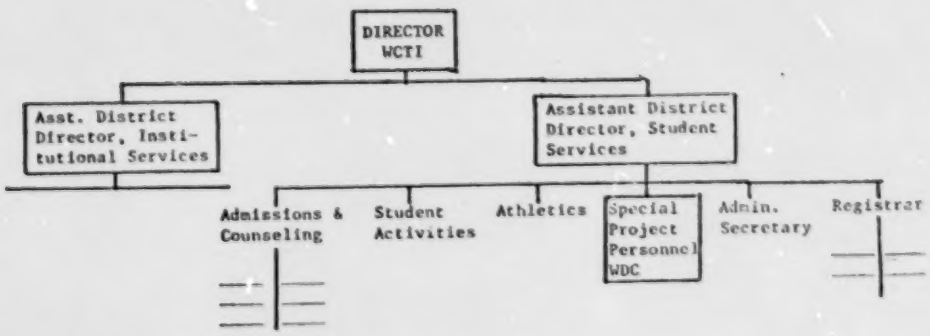
Figure 3. Marital status of participants in the Individual Counseling Program, December 1976 - June 1978

Marital Status	N = 650 #	%
Married	285	44
Single	138	21
Divorced	116	18
Separated	75	11
Widowed	36	6

Figure 4. Employment status and family income levels of participants in the Individual Counseling Program, December 1976 - June 1978

Status	N = 650 #	%
Currently employed	270	42
Currently unemployed	380	58
Below 7,000	220	34
7,000 - 10,000	136	21
10,000 - 15,000	95	15
over 15,000	199	30

Figure 5. WCTI Organizational Chart



office, and consists of a three-room complex--a small reception area which also serves as a learning and materials resource center and secretarial work station, a Director's office, and a counseling office. Both offices are shared frequently among all staff members for individual counseling sessions. Office sharing is helped by the fact that many sessions and activities are held off campus at the YWCA, in secondary schools, at private nomes, at other WCTI facilities, or at employer sites. While space shortages represent a problem, in August of 1979 the Center will move to larger quarters as a result of the completion of a new building.

Materials. What WDC lacks in facilities it makes up for in printed resources. The Center has an enviable collection of educational, career, and feminist literature. Among the more useful, according to staff and clients who were interviewed, are the following:

- A staff-made scrapbook of recent newspaper, journal, and magazine articles on what women of all ages are doing vocationally and avocationally.
- A copy of the Wisconsin Occupational Information System (WOIS).
- College, scholarship, and financial guides with names and numbers of specific contact people at each school (contacts were acquired through personal visits by WDC staff).
- The Career Options series for Undergraduate Students-Catalyst Series in industrial management, accounting, and government and politics.
- A Career Search System--an individual workbook approach for motivated participants.
- Materials published and disseminated by Wisconsin's Commission on the Status of Women.
- A printed list of job openings in Waukesha county and the vicinity.
- Published books, such as (1) The New Assertive Woman (Phelps and Austin); (2) Women as Winners (Jongeward and Scott); (3) Go Hire Yourself an Employer (Irish); (4) Who's Hiring Who (Lathrop); and (5) What Color is Your Parachute? (Bolles).

Program Activities

The major activities of the WDC staff program include counseling, planning and conducting seminars, support and follow-up services, and working with employers and community. Each of these activities is explained briefly under WDC's main program elements, which are: recruitment, counseling, informational, support services, community involvement, and job development and placement.

Recruitment program. The WDC has promoted four different approaches to recruiting participants. These include: (1) newspaper articles; (2) radio and TV announcements; (3) WCTI publications, including student catalogs, handbooks, and special brochures; and (4) referrals. Based on the responses of 650 participants, the most successful method appears to be referrals (see Figure 6). The WDC Director points out, however, that during the first months of its existence the program relied heavily on newspaper, radio, and WCTI publications. "Now that we are more well known on campus and in the community, our most successful method is word of mouth," she reports.

Figure 6. How participants became aware of program:

N = 650

Method	No.	%
Newspaper	103	16
Radio, TV	11	1
WCTI publications	188	29
Friend	148	23
Referral, and other	200	31

Counseling program. Individual personal, career, and employment counseling is conducted at four different campus sites. Scheduling is flexible and includes hours, days, evenings, and sometimes Saturdays.

Group counseling is provided in the Women in Transition (WIT) groups offered at a variety of locations. WIT groups touch on the following topics: self awareness, decision making and goal setting, assertiveness

training, transactional analysis, interviewing and resume writing, rational behavior training, relaxation practice, exploration of sex-role stereotyping and socialization, career planning, and assistance for those seeking employment. Many clients work with the individual counselor while attending one or more groups.

In order to specifically meet the needs of disadvantaged, minority, and handicapped people, special group counseling sessions are offered for the following groups (setting in parenthesis):

Spanish Speaking Women (CETA Clerical Training)
Unwed Mothers (Home for Unwed Mothers)
Women in Prison (Pre-release Center)
Parents Without Partners (Displaced Homemakers)
Disadvantaged (CETA Training Groups)
Disadvantaged and Handicapped (Pre-Employment Classes)
Handicapped (Drug Center)

These groups focus on building self-esteem, helping to make career decisions, developing assertiveness, and helping with the job search.

Peer counseling is also a feature of the Center program. The WDC has contact with women in a wide variety of occupations who talk with and advise clients on particular occupations. Also, women in training at Waukesha County Technical Institute act as peer counselors for other women students in the school. A small group of women students now meets on a weekly basis to provide emotional support and counseling to one another as they pursue their studies at WCTI. A variety of occupations and training programs is dealt with in the peer counseling program, including property assessment, supermarket management, insurance sales, machine tooling, drafting, welding, and electronics.

Informational program. The WDC instructional program consists primarily of workshops and seminars. These include:

Industrial Exploration Day for Women: Participants are given hands-on experience in welding, drafting, electronics, and machine tooling. Later in the day, they talk with women in those occupations, and tour area industries to observe people at work in the field.

Today's Woman in Search of a Job: Focuses on survival skills for women in the job market. Participants learn how to assess their own skills and abilities, how to determine which jobs would be satisfying, how to find out about jobs, and how to present themselves to a potential employer.

Women's Rights Day: Professional women from the medical, legal, and employment fields speak about the changing laws and attitudes affecting women and their rights.

Career Exploration for Women: Features a panel of women in a variety of nontraditional careers, including a food broker, an industrial lab technician, a supermarket manager, a tool and die maker apprentice, and a property assessor.

Handling Stress & Emotions: Designed to help develop various ways in which to cope with the stress of everyday living. Rational behavior therapy is a technique that helps women to manage their emotions.

Women in Management: For women seeking more responsible positions. Includes a panel of women in management sharing experiences, and workshops on increasing supervisor effectiveness.

Workshop for Women Who Plan to Start a Business: Designed to provide basic information to women who plan to start a business. The content of the workshop is also valuable to those who have recently started a business. Information is presented from a woman's viewpoint, whenever appropriate.

Many workshops are held off-campus to benefit both employers and employees. In the past, these have included:

Two short seminars that were held on the premises of a manufacturing corporation to discuss Affirmative Action and the changing roles of women. One session was for upper-level management, and the other was for female employees.

A workshop held at a postal district office to assist postal employees in planning for career advancement within the postal system and to help them assess their strengths and career objectives.

An all-day rap group held at a local high school where students gathered and discussed the effects of sex-role socialization and stereotyping.

An assertiveness training workshop for nursing staff held at a convalescent home.

Support services. Support services are a main feature of the Women's Development Center. Much of this is individual, in response to whatever needs arise. In addition, the group process specialists and recruiter counselors recruit, interview, and counsel women, provide necessary testing services, and assist in educational or vocational planning and in development of job-seeking skills. After counseling, all individual clients are contacted by phone to determine their status and to help evaluate the WDC counseling program. "Frequently, it is this follow-up call that provides the client with the extra incentive to achieve her goal," one recruiter counselor indicated.

Another support service of the Center is a referral system. The Center maintains cooperative relationships with community agencies which serve the same target population as the Center. These include the Work Incentive Program (WIN), the Division of Vocational Rehabilitation (DVR), La Casa, an Hispanic Adult Activity Center, the Wisconsin State Employment Service Public Health Department, the Waukesha County Mental Health Association, the Catholic Social Services agency, and the Lutheran Social Services agency.

The Women's Development Center regularly assists clients in the utilization of the services that Waukesha County Technical Institute provides. These include:

- Testing
- Academic counseling
- Admissions counseling
- Job placement
- Entry into apprenticeship programs
- Adult or high school education
- Diploma classes
- Upgrading skills

Job development and placement. A major concern of the Women's Development Center is to help women who are in need of employment. To meet this need the Center has sponsored workshops for local employers and employees to help them understand the changing role of women in the work force, how they can better utilize women in their companies, and the impact of recent legislation which emphasizes sexual equality in employment.

Another task Center staff have begun is an assessment of the employment opportunities for women in Waukesha County. By visiting area employers, staff have been able to ascertain the types of work open to women, training needed, opportunities for advancement, skill requirements, nontraditional jobs in which employers would be willing to place qualified women, and possible areas of cooperation with the Women's Development Center. A profile of employer contacts is maintained on file at the Center. Employers who have been contacted have generally been cooperative, and have often released female employees for speaking and counseling engagements at the Center. They have also alerted the Center to openings in their companies, and have encouraged their employees to use WDC services to assist them in upgrading their employment status.

Formal job placement services are provided through the WCTI Placement Services, which participants of the Center may utilize. Center counselors also maintain a file of job openings and inform clients of appropriate openings.

Community involvement. The support services of the Center often involve the community. WDC views "community" as any setting outside the Center from which clients come or are likely to go to receive help, funding, or employment. Community, then, may refer to the Waukesha County Technical Institute itself, the county of Waukesha, and even the state of Wisconsin.

For example, the Center maintains an ongoing cooperative relationship with other Vocational-Technical and Adult Education (VTAE) Institutions around the state. The staff has worked with other districts on a variety of tasks. Among these were a presentation to the Trade & Industrial Program Coordinators of various schools concerning women in nontraditional occupations; a visit to the Nicolet VTAE Institute to serve on a panel discussion concerning the establishment of a center for women on that campus; and a conference with staff from the LaCrosse VTAE Institute on the same topic. Also, staff traveled to the Fond du Lac VTAE Institute to present a workshop on the displaced homemaker. And WDC staff participated in a state conference addressed to services provided to displaced homemakers.

Women's Development Center staff works with an Advisory Council of representatives from women's groups, community agencies, and businesses. This Council meets twice a year and advises staff on employment trends and needs, training opportunities, and other supportive services.

Community outreach has been an important feature of the program in WDC's first two years. Several examples of such efforts have been:

- CETA projects for women at the Waukesha County Technical Institute's New Berlin Industrial Park Campus received weekly group counseling to aid them in their human development. One of these projects was comprised entirely of Spanish-speaking women.
- Pre-employment classes at the Downtown Campus of the Waukesha County Technical Institute are given training in assertiveness by WDC staff.
- The Division of Vocational Rehabilitation refers clients for counseling and classes.
- The Waukesha County Social Services Department refers clients from the county courthouse.
- At Rosalie Manor, a home for unwed mothers, staff provide group counseling and vocational activities.
- Currently, WDC is meeting with a group of 20 women who are about to be released on parole. The Center is assisting them in building their self-esteem and in preparing them for job interviews.

Costs and Funding Sources

The Women's Development Center, for the most part, is funded through State vocational education funds. This accounts for 55% of the program budget. WCTI provides the other 45% through property tax revenues. Estimated operating costs are shown in Figure 7.

Figure 7. Approximate costs of the Women's Development Center.

Date	Type	Cost
10/76-6/77	Starting costs	24,000
7/77-8/78	Operating costs	73,000
8/78-8/79	Projected budget	120,000

PROGRAM EFFECTIVENESS

The Women's Development Center has from the beginning attempted to collect evidence regarding program effectiveness. Over a period of two years, staff have collected data on a number of quantifiable measures suggesting the success of the program. Among the most significant of these measures are the following:

- o Participant involvement. In a two-year period the Center has served 5,001 people and 176 organizations and contacted 119 agencies and employers, including:

Individual Counseling	650 Participants
On-campus Seminars and Workshops	734 "
Off-campus Speeches and Conferences	3,444 "
Classes/Group Counseling	913 "
Agency Contacts	75 Contacts
Employer Contacts	44 "

- o Client achievement. In as much as the Center is still relatively new, most of the clients are still involved in whatever aspect of the program they used. Of counselees who have completed the program, 94% achieved their stated goal, as shown in Figure 8.

Figure 8

WOMEN'S DEVELOPMENT CENTER

Summary of Clients Completing Services
December 1976 - June 1978

N = 229

Have secured employment or have improved their employment status:	43%
Have enrolled in classes at Waukesha County Technical Institute:	24%
Have enrolled in courses at other area colleges:	6%
Have met other personal goals:	21%
Were referred elsewhere:	4%
Found that the services did not meet their needs:	2%

- Nontraditional training and employment. Gains in nontraditional employment and training enrollment of women directly attributable to the Women's Development Center have been made. Fifteen clients have enrolled in nontraditional training programs. These have included electronic servicing, electronics, drafting, industrial safety, and police science. Two have completed nontraditional training programs, and six have been employed in nontraditional jobs, including insurance sales, expeditors, electronics purchasing agent, business machine sales, and drafting.

  Although these numbers are small, they represent the end point of a series of efforts. It requires time and effort to bring many women to the realization that they are worthy and capable of meaningful careers outside the home. Many women at the Center feel the need to establish their self-confidence and self- and career-awareness before deciding on a new direction and possibly a new career.

- Positive responses. The Women's Development Center evaluates each seminar and workshop. Although it is impossible to include all evaluations, as different forms are used for each, Figure 9 represents a typical example.

Figure 9. Seminar Evaluation--"Today's Woman in Search of a Job," October 8, 1977

N = 81

Evaluation Question	Response			
	Yes		No	
	#	%	#	%
1. Did the seminar meet its goal for you?	77	95	4	5
2. Were the workshops effective? Did they provide enough information?	68	84	13	16*
3. Were the speakers effective? Did they present their material in a meaningful way?	81	100		
4. Would you like to see future workshops?	80	99	0	0

5. How do you rate the seminar?	50	excellent	82%
	12	good	17%
	1	poor	1%

6. What was the most meaningful part of the seminar for you?

Selling Yourself (Interviewing)	20
Identifying Skills	12
Variety of other Topics	40

7. What action do you plan to take as a result of the seminar?

To better prepare myself for a job:	33 (45%)
To take classes and group counseling at WCTI:	15 (21%)
To make an appointment with Women's Development Center counselor:	12 (17%)
To explore the job market more thoroughly:	12 (17%)

PROGRAM FUTURE

Institute administrators, as well as the Women's Development Center staff, feel that the Center will continue to operate. "We need the support of federal and state legislation and funding, and we must continue to pursue additional avenues for funding, but we will be a continuing department as long as there is a need in the community," the Director indicates.

Some of the plans for the future include:

- More community outreach programs
- Continued emphasis on increasing enrollment of women in nontraditional occupational training programs
- More assistance to high schools, particularly in letting young women know what is available at the Center

Counseling programs, special speeches and conferences, and work with employers are all expected to continue, and if adequate funds are available, these programs will be expanded. The most pressing needs for the immediate future of the program are a larger main campus facility and more staff.

REPLICATING THE PROGRAM

"What is the most important feature of the Women's Development Center?" This question was asked of many different people familiar with or involved in the program. Without variation, the response was one word: "Staff." Staff commitment, sensitivity, and know-how were ultimately responsible for the success of the program.

Features of the Center considered especially important in replication of the program, in the view of various staff members, include:

- A diversity of program content and approach. In serving a large community of people, one will find people at different places in their lives. Some need help in entering the job market, some need encouragement and support to stick with a nontraditional training program, others need to be made aware of career and life alternatives, and still others need first to gain confidence and respect in themselves as individuals.

- Flexibility of program. In serving a largely adult population, flexible class and counseling schedules must be maintained. A willingness and capacity to meet community, school, and employer requests for help with little advance notice is needed if the Center is to maintain its goal and image of "service."

One of the essential features of the program is its "management by objectives" approach to program planning and operation. At the beginning of each year, job functions, objectives, performance standards, and action plans are established. This approach facilitates the evaluation process. "By taking stock at the end of each time period, we know what we have achieved and where we have failed to meet expectations."

Another program feature pointed to as contributing to success is the Center's "integration concept." The Center has never been considered a separate entity outside the jurisdiction of the Institute. Like other Institute departments, it is considered a part of the Student Services Program. As the WCTI Director points out, "This gives the Center credibility and clout, particularly when it is just beginning." How can this kind of integration be brought about? The WCTI Director suggests, "An institution's charter or mission statement in most cases will support the concept of such a Center. In fact, most of the time the mission statement builds a strong case and rationale for these kinds of services." His advice: "Look at your mission statement, then build the program that fits."

CONTACT PERSON AND ADDRESS OF PROGRAM

Ms. Ruth Fossedal, Director/Counselor
Women's Development Center
Waukesha County Technical Institute
800 Main Street
Pewaukee, WI 53072

DO NOT FILM THIS PAGE

PART II

PROMISING APPROACHES

DO NOT FILM THIS PAGE

CURRICULUM AND MATERIALS RESOURCE CENTER

Eutaw, Alabama

TARGET POPULATION

The Resource Center, funded by the Women's Education Equity Act, is in its second year of operation, providing resources and information to counselors in five rural counties in west Alabama. It operates as a multimedia library and offers inservice training programs, reaching junior and senior high school counselors with materials and methods useful in sex-fair counseling. Although the immediate target population is the counseling staffs of schools participating in the program, the ultimate beneficiaries are the female students. A majority are black, and their occupational goals have been in traditionally female vocational fields.

PURPOSE

The major purpose of the Resource Center is to assist counselors to help female students to expand their vocational options. This is done by providing sex-fair vocational information, and training in vocational counseling techniques. The community is also encouraged to use the Center to obtain up-to-date, unbiased information about careers.

IDEA FOR REPLICATION

Establishing a center that can serve several rural counties enables small, remote districts to have access to films, tapes, source books, and other resource materials which the Resource Center has screened and that can help students consider vocations on the basis of their abilities and interests. Equally important is the technical assistance and inservice training available from the Center, a supportive strategy that combines information with techniques. Centralizing resources and training is cost-effective, particularly in low income, agricultural areas where each separate school system may not have the budget to provide comprehensive services to counseling staff. Because there are few nontraditional female role models in this region, and family and community influences are often traditional, school counselors who are trained in sex-fair career counseling are important in broadening career options for students.

For women no longer in a formal educational setting, the Center is also serving as an Open Door Counseling and Referral Center. Adult women are offered counseling and referrals to job opportunities and training programs, and are encouraged to use the materials and resources of the Center.

ACTIVITIES

The Resource Center continuously gathers materials and distributes annotated lists of available resources which counselors can obtain free on a loan basis. Counselors are also asked to suggest materials they would like added to the Center's collection. Center staff assist counselors in planning, conducting, and evaluating specific school programs. For example, Center staff have identified local women working in nontraditional jobs as resource persons for high school Career Day Programs. Students and teachers are also invited to use the Center.

During the first year, thirteen junior and senior high school counselors and almost 700 female students in the 7th, 9th, and 11th grades were surveyed to assess the adequacy of the counseling programs and materials, to determine counselors' and students' attitudes toward male and female work roles, and to establish baseline data on the effectiveness of the Center's activities. A post-survey at the end of the second year is planned to obtain comparative data. A Resource Kit for Counselors is being developed to address the specific problems identified in the survey. Counselors, for example, indicated the need for information about current employment and training opportunities for women in Alabama. Workshops for counselors have been held to examine their personal attitudes and stereotyped behaviors, and to demonstrate methods by which those behaviors may be changed in themselves and with their students.

EVALUATION AND DISSEMINATION

Anecdotal information from counselors, students, and other school personnel indicates favorable responses to the first year's efforts. Assessments of the sex-role stereotyping workshops and gains in counselor awareness have shown that positive changes are occurring in attitudes and behaviors. A second year evaluation will be conducted to determine actual use of the resources and to compare rate of attitudinal and behavioral change. Resource Kits will be disseminated to counselors during the second year, and workshops are being planned to demonstrate how the methods and materials presented in the kit may be used.

FUNDING: Women's Educational Equity Act

CONTACT PERSON AND ADDRESS

Schadell Woolridge
Miles College-Eutaw
P.O. Box 31
Eutaw, Alabama 35462

CAREER DEVELOPMENT FOR WOMEN OFFENDERS

Miami, Florida

TARGET POPULATION

Since February 1977 a comprehensive career development program for female ex-offenders has been operating through Miami-Dade Community College. The program is jointly funded by the Women's Educational Equity Act (WEEA) and the Comprehensive Employment and Training Act (CETA), with facilities and other in-kind services provided by the college. Ninety percent of the target population is made up of economically disadvantaged, minority women. All participants are currently incarcerated or have been recently released from the Women's Detention Center. Thirty percent of the participants are identified as "low risk" (misdemeanor violations, probation violations, non-drug addicts).

PURPOSE

The program is based at the Detention Center to help women while they are inmates to gain the skills they will need to become financially independent after their release. Job skills, work experience, basic math and language skills, and personal, group, and family counseling are provided. Training is also provided in basic survival skills that are vital to living and working in the outside world. The often difficult transition to the outside is made easier for released women by the support services, which include counseling, job placement and follow-up, and additional academic and vocational courses.

IDEA FOR REPLICATION

Participants are recruited while they are incarcerated. The instructional modules, developed for the six 3-credit courses offered to the women, were designed specifically for this target population. They can be used in other women's facilities either individually or as part of a similar comprehensive career development program. Contacts with community employers are an important part of the program, both to provide work experience and develop future jobs for released women. When program graduates are placed, contacts with employers and employees are continued so that program staff can help if problems occur. A unique component of the program is the tuition-free Human Relations class offered at the Center to the correctional officers. The course is intended to increase the officers' support and positive attitudes toward the women inmates and the program.

ACTIVITIES

While in the Detention Center, program participants are required to take Human Relations, Psychology of Career Adjustment, and Consumer Education, and to attend up to one hour of individual and two hours of group counseling each week. The women are encouraged to take three Basic Skills courses in reading, writing, and math. Classes meet five days a week for seven hours a day, and participants are paid $2.90 an hour for up to 25 hours a week of class attendance. Three hours of community college credit is given for successful completion of each course.

EVALUATION AND DISSEMINATION

Graduate workshops are held twice a year for participants, graduates and their families, and for staff to discuss problems and evaluate program effectiveness. Two evaluations by an outside consultant will be conducted in 1979, and continuous contacts through counseling sessions and follow-up procedures provide a means to assess the strength and weakness of each program component. The program is monitored as well by the WEEA and CETA project officers. Of the 17 working participants in September 1978, 7 were in nontraditional fields such as auto mechanics, welding, and landscaping. How-To-Do-It Manuals for each program component, including the college courses and a program management manual, are available and make up the model for rehabilitating women offenders.

FUNDING: WEEA, CETA, and Miami-Dade Community College (in-kind services and support).

CONTACT PERSON AND ADDRESS

Wilhelmina Tribble
Miami-Dade Community College
11011 S.W. 104th Street
Miami, Florida 33176

EQUAL GOALS IN OCCUPATIONS (EGO)

Honolulu, Hawaii

TARGET POPULATION

Two comprehensive statewide programs to reduce sex inequities are being conducted in Hawaii, using federal funds allocated to vocational education. The target populations for both the secondary-level and community college projects include vocational education instructors, counselors, administrators, and students. During the first year, EGO focused on sex-role stereotyping in vocational education in one high school and one community college. Expansion to other campuses is part of the second year's efforts.

PURPOSE

At both educational levels the major purposes of EGO are to involve faculty, students, and their communities in learning about sex-role stereotyping, understanding the legislation affecting sex equity, and developing materials and resources for analyzing the extent of stereotyping in vocational programs at their own schools. Participating school teams plan and conduct workshops for their particular communities, staff, and students. The overall goal of EGO is to increase female and male enrollments in nontraditional vocational programs.

IDEA FOR REPLICATION

The secondary-level program was designed to be replicated through the use of the EGO Sourcebook and the materials for student mini-sessions developed during the first year. Activities for each major component--legislation, counseling, learning environment, and public relations--are provided with easy-to-use suggestions. For example, checklists for counselors and for vocational instructors are included so that they can recognize whether their behaviors toward students are sexist or not.

During the first year, the community college involved in the project developed two videotapes on stereotyping and nontraditional programs that are available for use by high school and community audiences. In the fall of 1978, EGO staff made presentations at six campuses to inform faculty about the legislation and to suggest ideas to reduce inequities in vocational programs. The colleges have been asked to submit miniproposals for funding projects that will promote equal opportunities in vocational education for both sexes.

ACTIVITIES

As part of the pilot project, high school vocational educators participated in an eight-week course during which they compiled a sourcebook of information and activities. A special student mini-course was also developed that includes self-inventory questionnaires for female and male students, facts about working women, and classroom activities to create student awareness.

Teams of ten vocational instructors, counselors, and administrators from each of seven high schools attended a fall 1978 workshop. The team developed action plans to reduce sex-role stereotyping in their vocational education programs. Outcomes will be examined at the end of the school year to determine whether changes have occurred in community, student, and faculty awareness of sex inequities.

EVALUATION AND DISSEMINATION

Evaluations of each workshop are conducted to assess the change in awareness, knowledge, and attitudes of participants. Enrollment figures of males and females in nontraditional classes will be compiled during the 1978-1979 school year. Preliminary evidence shows a greater awareness of sex equity issues in counselors, administrators, and instructors who have attended workshops. The community college involved in the first-year program has established an enrollment goal of 50% participation of males and females in nontraditional occupational programs.

The EGO sourcebook, student mini-session, and sex-fair brochures for occupational areas have been widely disseminated. Copies were sent to all state Sex Equity Coordinators and to regional assistance centers. The EGO-gram, a monthly newsletter, is mailed to all schools in the state to keep vocational educators informed about state and national efforts to achieve equity, trends in nontraditional enrollments, and new information sources and research studies.

FUNDING: Hawaii Office of the State Director for Vocational Education (under Title II, PL 94-482)

CONTACT PERSON AND ADDRESS

Barbara White
Bachman 101, University of Hawaii
2444 Dole Street
Honolulu, Hawaii 96822

SECOND START: AN EXPERIENTIAL APPROACH TO REDUCTION OF SEX ROLE STEREOTYPING

Elgin, Illinois

TARGET POPULATION

Funded in September 1977 with Vocational Education Research (Part C) money, Second Start provided women with career awareness and exploration activities in technical areas. Unemployed and underemployed women from an urban, midwest region, who were high school seniors or older, were exposed to six industrial career fields during an eight-week cycle.

PURPOSE

The major goal was to demonstrate and test a career awareness model designed to reduce sex-role stereotyping through an exploratory program in industrial careers. Women received an overview of technical programs through lectures and laboratories in each of six vocational fields, and learned basic skills in the area of their choice by specializing for two weeks. Participants also examined their own attitudes toward sex roles, gained information about nontraditional job opportunities, and were helped to make career decisions consistent with their personal value systems.

IDEA FOR REPLICATION

The experimental program was able to make efficient use of existing community college facilities and staff by conducting shop sessions during evening hours and on Saturdays. This enabled women who were employed, lacked child care or transportation, or were attending high school during the week to participate. Most of the funds were used for staff and instructor salaries, and for materials. Program curricula, resource materials, and counseling and evaluation techniques have been documented. One especially effective strategy was to train counselors and instructors together in working with the particular target population.

ACTIVITIES

One-week units in drafting, machine tool, welding, data processing, electronics, and plastics were offered, including hands-on lab experiences, observations of successful role models, and field trips to industrial sites. Individual and group counseling were provided, and additional support services such as facilities for child care were available. Classes met for 11 hours a week, during two evenings and on Saturday mornings. An average of 16 women participated in each of four complete cycles. Counseling sessions included decision-making activities, resume writing, interview

techniques, training in communication and job-seeking skills, and developing awareness of sex-role stereotyping.

EVALUATION AND DISSEMINATION

Assessments of student attitudes toward the program content and activities, and changes in awareness levels, were conducted at the end of each cycle. Results were used to modify the next cycle's program. Students showed an increase in knowledge about industrial careers, and their evaluations of the program were positive. Pre- and post-tests were administered to control groups and to the experimental groups, using Bem's Sex Role Inventory and Gambrill and Richey's Assertion Inventory. Changes in sex-role awareness and attitudes toward nontraditional occupations were evident in test result comparisons and class evaluations. More than half of the 63 who completed the program are continuing in nontraditional skill training and on-the-job training. Nineteen women are now in drafting classes, three in machine tool, three in welding, five in electronics, five in data processing, and three in plastics. Additional follow up will be carried out after the start of the winter 1979 quarter to determine how many women are continuing in nontraditional programs.

FUNDING: USOE-BOAE Vocational Education, Part C

CONTRACT PERSON AND ADDRESS

Donna Rudy
Elgin Community College
1700 Spartan Drive
Elgin, Illinois 60120

CENTER FOR DISPLACED HOMEMAKERS

New Orleans, Louisiana

TARGET POPULATION

One of the first programs for displaced homemakers in the South has been funded by Louisiana's Vocational Education Department and operates through the Louisiana Bureau for Women, Department of Health and Human Resources. The target population is displaced homemakers, individuals over 35 who are usually divorced, separated, or widowed. Of the 90 enrollees during the first five months of the Center's operation, 88% were black, and 69% had children living at home. Their average educational level was 11.7 years, and their average age was 47 years. Many had no marketable skills or recent work experience.

PURPOSE

The major purposes of the program are to provide personal and peer counseling; workshops to train women in job search techniques, financial management, and communication skills; referrals to legal, health, or financial services; educational and occupational information; and job placement. The Center provides an urban model of a multi-service agency that uses a network of existing community, educational, and employment resources.

IDEA FOR REPLICATION

A close working relationship has been established with the Department of Vocational Education and the Jefferson Parish Vocational-Technical School to make various occupational programs available to the persons served by the Center. Training for nontraditional jobs is encouraged through the close affiliation with the Women and Employment Program (WE), also sponsored by the Bureau for Women and housed with the Center for Displaced Homemakers. After their initial interviews with the Center staff, women use WE to apply for apprenticeships in trades such as carpentry and metal working, or to apply for training or jobs in technical fields.

ACTIVITIES

During the intake process one of the two staff counselors works with the enrollees to identify their needs, determine short- and long-range goals, and develop plans for placement in training programs or in jobs. If financial problems exist, such as trouble in applying for social security or veteran's benefits, the Center helps participants to resolve them. Then the women are counseled about available options, including training programs and employment possibilities. Participants using the job placement services

are required to attend a personal development workshop offered two hours a week for four weeks. Workshop topics include assessing skills and interests, preparing for interviews, and preparing for employment. Training and placement in nontraditional employment are then arranged through WE.

EVALUATION AND DISSEMINATION

Of the over 150 women enrolled since April 1978, about three-fourths have been placed in training programs or are employed. Program effectiveness is determined through client evaluations of services and by follow-up of the women served. Personal, telephone, and mail contacts are made to find out about the clients' job responsibilities, salary, and opportunities for advancement.

Plans are being made for a similar center in rural Louisiana, which will adapt the components and services of this one. Both Centers will serve as a clearinghouse of information for and about displaced homemakers. Materials such as guidelines for translating current skills into marketable skills, specific content descriptions of workshops and seminars, and the program model description are being developed for dissemination.

FUNDING: Louisiana Department of Vocational Education

CONTACT PERSON AND ADDRESS

Jan Ortego
3433 Tulane Avenue
New Orleans, Louisiana 70119

BEACON (Build Equity and Create Options Now)

Waterville, Maine

TARGET POPULATION

Administrators, counselors, and teachers in Maine's secondary schools are the primary target for this program. Male and female students in grades 9-12 will benefit as a result of their school's participation in the program. During a one-year pilot program at Waterville High School, project staff developed and tested strategies to improve sex equity in vocational programs. A one-week training session was held in the summer of 1978 for three-person teams nominated by superintendents from four other districts. Individuals selected were tenured academic or vocational school staff who had a commitment to sex equity and the capacity for leadership as change agents.

PURPOSE

BEACON was funded by the Maine Bureau of Vocational Education as one way to help meet the legislative mandate of 1976--a model project that could contribute to the reduction of sex bias in vocational choice. Initially, BEACON was designed to incorporate successful components from three out-of-state programs, EVE (Texas), New Pioneers (North Carolina), and Expanding Career Horizons (Illinois). The basic goal was to promote institutional changes that would lead to greater awareness by students and faculty concerning issues of sex bias and discrimination. The anticipated outcomes for students would be to expand career choices to include nontraditional vocational training options. Teams trained in the 1978 summer session developed plans related to achieving sex equity in vocational education programs that would be used in their own districts and schools.

ACTIVITIES

Activities during the first year (1977-78) included a survey of Waterville students, to determine how they chose their high school courses, and of staff, to examine their attitudes toward sex-role stereotyping and knowledge about Title IX. Students who were peer counselors were trained to identify sex-stereotyped attitudes and behaviors in themselves, in counseling materials, and in the media. Staff workshops were held to increase awareness and knowledge about sex inequities, particularly in vocational programs. A guidance advisory group, made up of counselors and parents, was trained to evaluate guidance materials for bias. BEACON staff also helped vocational administrators to write proposals for funding sex equity projects. One funded project resulted in the production of brochures emphasizing nontraditional vocational training opportunities.

Activities for the second year focus on training teams from four school districts to develop programs for their own schools. A "training of trainees" program is being designed for a selected group of local teams and

State Department of Education personnel. Consultants, using organizational development theory, are training participants in techniques designed to make institutional changes that can lead to sex equity.

EVALUATION AND DISSEMINATION

An evaluation of BEACON at the pilot site in Waterville is included in the Final Report, August 1978. Currently, BEACON is in its second year of operation and operating at four sites beyond the original one at Waterville High School. The program has evolved into building teams of educators who design and use intervention strategies to achieve equity in their own schools. Evaluation data measuring positive changes will not be available until the end of the school year, June 1979. Products from the first year are available for use with students and staff statewide and include the Final Report, which includes activities and resources; a videotape of nontraditional workers in Maine (New Job Horizons); and a slide show about Title IX requirements. In January 1979 responsibility for the continuation of Project BEACON was transferred to the state Affirmative Action Coordinator under the Bureau of Vocational Education.

FUNDING: Maine Bureau of Vocational Education
(PL 94-482)

CONTACT PERSONS AND ADDRESSES

Mary Lou Maisel, Consultant
RFD 2, Box 255
Waterville, Maine 04901

Edward Maroon
Affirmative Action Coordinator
Bureau of Vocational Education
Augusta, Maine 04333

NEW DIRECTIONS FOR WOMEN

Baltimore, Maryland

TARGET POPULATION

New Directions for Women, through a cooperative arrangement with the Maryland Commission for Women, has been conducting several projects to reduce sex inequities in vocational programs. Since 1976, operating the Center for Displaced Homemakers has been a major activity. As the second such center established in the nation, the Center has provided services to more than 4,000 women over 35 years old. Approximately one-third have been widowed, one-third divorced, and one-third separated, and few have recent, salaried work experience. New Directions has expanded its target populations to include vocational counselors and instructors, and high school students in vocational programs. Sex equity training programs are also being conducted for employers and community group leaders.

PURPOSE

As an umbrella agency offering various services to women and employers, New Directions has several major goals. One is to develop resources and materials to reduce sex bias and stereotyping in vocational choices. These resources are available for use by vocational educators and administrators, students, teacher educators, employers' and displaced homemakers. Another major goal is to offer technical assistance to school districts, employers, and community groups. The assistance takes many forms, such as presenting workshops at high schools concerning nontraditional occupations, conducting pretraining programs for employers, and consulting with community agencies interested in setting up their own Centers.

IDEA FOR REPLICATION

One special feature of New Directions is the pretraining program for potential female employees interested in entering nontraditional occupational fields. The pretraining is based on the identified needs of a cooperating group of area employers. Another feature has been the training of displaced homemakers to present sex equity workshops for high school students. New Directions has strengthened its position and broadened its offerings as a women's service agency by relying on several funding sources, including private industry.

ACTIVITIES

The comprehensive services of New Directions include a wide range of programs focused on nontraditional career avenues for women, including Starting Your Own Business, Executive Women's Network, the Center for Displaced Homemakers, the Sex Equity Project, and the Nontraditional Program. Some of the activities include:

- Staff Development Training: Includes analyzing local educational and staff development needs relating to sex equity, identifying existing programs in LEAs, and developing a modular training package for LEA workshops.

- Choosing a Nontraditional Career: Includes interviewing nontraditional vocational students and teachers and recommending to LEAs ways to meet the needs of nontraditional students and their teachers.

- Sex Equity Training: Includes additional inservice training for displaced homemakers who participated in previous sex bias workshops, and funding consultants and coordinating workshops for employers and community groups.

- Media Development and Publicity: Includes reviewing and purchasing materials, developing and disseminating brochures and a slide/tape show on successful nontraditional employees, and disseminating a quarterly newsletter.

Employers play a vital role in the pretraining program for nontraditional jobs by participating in monthly sessions with women who are interested in such jobs. Pretraining involves improving physical fitness, clarifying job values, and improving attitudes and knowledge about blue-collar work. The actual skills training is provided by the employers or union apprenticeship programs after the women are hired.

EVALUATION AND DISSEMINATION

Evaluation of the Displaced Homemakers program is being conducted by a third-party evaluator. Data are available for each year of operation that indicate the numbers served by the Center through career counseling workshops, job information, and referrals to training and educational opportunities. Specific data on nontraditional occupations and sex equity activities are being gathered for the 1978-1979 fiscal year. Dissemination of resource materials through the Center and information through New Directions' workshops is an activity of this year's program.

FUNDING: Maryland State Department of Education,
Division of Vocational-Technical Education
Maryland Department of Human Resources
Mayor's Office of Manpower Resources

CONTACT PERSON AND ADDRESS

Marion Goetze
12 East 25th Street
Baltimore, Maryland 21218

STUDENT COMMITMENT TO EDUCATIONAL EQUITY (SCEE)

Boston, Massachusetts

TARGET POPULATION

The Bureau of Student Services of the Massachusetts Department of Education obtained funding in 1976 under the Women's Education Equity Act to involve high school students statewide in a program designed to achieve educational equity. One part of the program is targeted at males and females in vocational technical high schools, but the program also includes students, teachers, counselors, administrators, and parents from all other types of high schools.

PURPOSE

The major purpose of SCEE is to inform high school students about the effects of sex bias, discrimination, and sex-role stereotyping in schools, and about the implications of Title IX for students. To achieve this goal, participating students are trained to recognize and evaluate sex-biased practices in educational policy and sex-stereotyped instructional materials and curricula. At the same time, students are provided with the skills to collaborate with adults in changing schools to comply with Title IX.

IDEA FOR REPLICATION

SCEE enables students to participate directly in educational decision making and in changing educational inequities that affect them. Teams of students receive leadership training to work with their peers, teachers, counselors, administrators, and parents. Inservice workshops have been organized for students, teachers, and counselors. The basic concept is to build a network of teams that can adapt various approaches to solve each particular school's sex-equity problems.

ACTIVITIES

Using films, videotapes, discussion groups, and presentations, SCEE staff presented a series of workshops to students and faculty on sex-role stereotyping. Students were hired for part-time work at the State Regional Student Service Centers and were trained for leadership roles in their own schools and communities. After training, teams from various schools have identified problem areas in their own schools, developed and implemented action plans, and monitored those activities. One vocational/technical school has an on-going student-written newspaper column, Dear SCEE, that deals with sex inequities; another produced a slide/tape presentation on nontraditional vocations to be used with junior high school students. One

school team changed the course enrollment policy to "partner" all students entering nontraditional vocational training, and another integrated a minicourse on sex-role socialization into the auto-body shop curriculum.

EVALUATION AND DISSEMINATION

Training manuals for implementing workshops, guidebooks detailing methods for establishing school teams and peer counseling, handbooks explaining legislative requirements and detailing leadership model development, and three videotapes have been produced. Nine school-based team models have been established and five Student Service Center models have been organized and are working with individuals and schools on action plans. A teacher-counselor inservice training model has been developed to train faculty in sex-fair classroom and counseling practices, and to provide support for student leadership teams.

Developing descriptive models of programs that can be replicated at secondary schools is a major objective of SCEE. The handbooks, manuals, and videotapes produced by the statewide program will enable potential adopters nationwide to organize their own student involvement programs.

FUNDING: Women's Educational Equity Act Program, USOE

CONTACT PERSON AND ADDRESS

Kathleen Atkinson, Project Director
Project SCEE
Bureau of Student Services
Massachusetts Department of Education 31 St. James Avenue
Boston, Massachusetts 02116

WORK IN TECHNOLOGY AND SCIENCE (WITS)

Cambridge, Massachusetts

TARGET POPULATION

Since the summer of 1976, teachers and counselors from middle and high schools in the greater Boston area have participated in workshops and internships sponsored by the Massachusetts Institute of Technology. Financial support is provided by the Massachusetts Department of Education and by grants from private foundations.

PURPOSE

WITS programs are designed to bridge the gap between educators and employers in technological and scientific fields, and to encourage female as well as male participation in technical fields. By directly involving secondary school faculty in actual work situations through summer internships and site visits to area industries, WITS is helping instructors to link the courses they teach to the job market. In addition, WITS encourages administrators to incorporate the interns' work experiences into their schools' curriculum and career counseling activities.

IDEA FOR REPLICATION

Because teachers and counselors of secondary students may influence their students in making career decisions, it is helpful to have faculty who have experienced how their courses apply to actual job requirements and employment opportunities. Summer interns return to their schools with work experiences they can pass on to their students, and with contacts to potential employers of graduates. The WITS program could be replicated especially in areas where industries are seeking qualified female technicians, engineers, and scientists.

ACTIVITIES

Industry site visits for teachers and counselors are carried on during the school year. Last year a regularly scheduled series of eight workshops was held for teams of teachers, counselors, and administrators. Workshop participants designed mini-courses and model programs for use in their own schools. They were encouraged to bring students to the series of Science and Public Policy lectures. Career opportunities in technology and science and the application of science and math to jobs were discussed in the workshops. Summer internships in 1978, three to eight weeks in length, provided approximately 40 school staff members with daily work experiences at local industries. They learned practical applications of their particular

academic disciplines and acquired a personal understanding of work environments, requirements, and responsibilities. Throughout the school year interns meet together to plan how to transmit their experiences to students, through curriculum, counseling, and vocational programs.

EVALUATION AND DISSEMINATION

Both interns and their supervisors from the host firms evaluate each of the series of workshops so that plans for succeeding workshops include activities that meet the needs of the educators. Workshop participants develop Handbooks containing teaching ideas and strategies, employer contacts, mini-lessons, and model programs. Descriptions of the WITS program are available to potential adopters.

FUNDING: Massachusetts Department of Education; Private foundations

CONTACT PERSON AND ADDRESS

Edith Ruina
Project WITS, Room 20C-228
Massachusetts Institute of Technology Cambridge, Massachusetts 02139

OPTIONS: A CAREER DEVELOPMENT PROJECT FOR RURAL HIGH SCHOOL WOMEN

Hanover, New Hampshire

TARGET POPULATION

Funded under the Women's Educational Equity Act, the Options Project developed curriculum materials for the target population of noncollege-bound, rural high school students. Although targeted for male and female students, the focus has been predominantly on women and the curriculum has been field tested primarily through home economics courses. After the first year of development and testing in nine rural New England schools, the curriculum was tested in New Mexico, Nebraska, Oregon, and Tennessee with rural, low-income female students from diverse ethnic backgrounds.

PURPOSE

Two primary objectives of the program were to develop a career development curriculum aimed at non-college bound rural high school women, and to gather data on the aspirations and perceptions of high school students. The curriculum was designed to be adaptable to classes other than predominantly female home economics classes, and to be used by teachers at rural sites nationwide without extensive inservice training.

IDEA FOR REPLICATION

The Options curriculum was designed for replication and it has been used at diverse sites. Although not specifically a vocational education equity program, the curriculum encourages students to understand traditional constraints to vocational opportunities and to consider nontraditional options among the range of work and training opportunities. Methods for adapting the curriculum have been described so that potential adaptors will have guidelines and suggestions to follow.

ACTIVITIES

The curriculum is organized into four units; Understanding People in Our Area, Decision Making, Life Planning, and The Juggling Act: Lives and Careers. The units are usually taught over a nine-week period, totaling approximately 45 hours of instruction. Case studies and problem-solving activities are included to allow students to test their decision-making skills. Coordinators for each field test site are trained, during week-long orientation workshops, to adapt materials and to train local teachers in the use of the materials. Options curriculum was introduced into existing home economics classes, primarily because those classes are electives often selected by rural female students. Classroom activities included class

discussions, outside speakers, small group work, a simulation game, and individualized, self-paced learning.

EVALUATION AND DISSEMINATION

Pre- and posttests of knowledge and attitudes of experimental classes using the curriculum were compared with control group home economics classes and with classes deliberately unrelated to home economics. Comparisons were also made between classes taught by teachers who participated in developing the curriculum and classes taught by teachers who did not. Results indicate that classes using the curriculum show significantly greater changes in information and attitudes than control groups. Few significant differences were found between teachers participating in curriculum development and those who did not.

FUNDING: Women's Educational Equity Act

CONTACT PERSON AND ADDRESS

Faith Dunne
Department of Education
Hinman Box 6103
Dartmouth College
Hanover, New Hampshire 03755

WOMEN IN THE TECHNOLOGIES (WITT)

Edison, New Jersey

TARGET POPULATION

In September 1977 the Women's Career Information Center of Middlesex County College obtained funds under the Women's Educational Equity Act to counsel and encourage women to explore nontraditional career opportunities. Phase II of WITT, funded by the State Division of Vocational Education, is building on this effort to encourage high school and adult women to consider the technologies as a career option. Outreach workshops are being held to inform black and Hispanic women about the Center's activities.

PURPOSE

The main purpose of WITT is to make women aware of nontraditional career opportunities in the technologies by offering a series of exploratory activities and providing current information about educational and job opportunities. A primary goal of Phase II is to work directly with employers and their staff in personnel and management to assist them in learning unbiased management and interviewing techniques.

IDEA FOR REPLICATION

The exploratory process includes an introductory course, seminars on sex stereotyping, hands-on laboratory experiences, and other courses that focus on topics such as nontraditional careers and math phobia. WITT is linking five industries to a community college's technical programs by assessing the training needs of the employers, and tailoring courses to meet those needs. The WITT staff of career advisors has also presented seminars at local high schools for male and female students and counselors.

ACTIVITIES

The exploratory program includes Introduction to the Technologies, Sex-Stereotyping Seminar; Hands-on Laboratory Experiences (electrical, civil, mechanical, computer labs); A New Look at Women in the Technologies; Alternate Roles for Women; Getting to Know Me (selfawareness course); and the Nontraditional Careers Workshop. Some topics (Assertive Management) are designed for both men and women, some (Math Phobia) primarily for women. A videotape of women in nontraditional employment in the technologies demonstrates the WITT process and is used in the courses and for recruitment purposes.

EVALUATION AND DISSEMINATION

WITT has served almost 1,500 participants, through counseling, seminars, and workshops. Phase II has offered training seminars in leadership, assertive communications, and career planning to over 300 participants. Adolescents and adults have been surveyed to determine their attitudes toward nontraditional employment, and evaluations of program effectiveness are being conducted using an activity evaluation scale, a female working conditions scale, and an attitudinal survey. A follow-up of seminar and workshop participants is planned to determine enrollment changes in technical programs.

FUNDING: WITT: Women's Education Equity Act
WITT-Phase II: State Division of Vocational Education

CONTACT PERSON AND ADDRESS

Bonnie Dimun
Women's Career Information Center
Middlesex County College
Edison, NJ 08817

PROJECT EXCEL

Las Cruces, New Mexico

TARGET POPULATION

The Las Cruces project is patterned after the Appalachia Educational Laboratory model for Experience-Based Career Education, and federally funded as a vocational demonstration project. Students in the 11th and 12th grades of two high schools are the target population. The schools are in a rural agricultural region and serve approximately 50% Spanish-surnamed students. Participants were randomly selected from a pool of students with average or higher ability from all socioeconomic groups who have evidenced disinterest in the traditional vocational and academic programs.

PURPOSE

The major goal of the EBCE project is to link academic instruction with knowledge necessary for career exploration experiences, through programs individually developed by students with their Learning Coordinators. Classroom work on basic skills is related to job explorations at cooperating job sites in the community. Promoting sex fairness in all aspects of the EBCE program is a high priority.

IDEA FOR REPLICATION

The national EBCE program is based on the replication of models developed and tested by four research laboratories. Model adoption has occurred at widely diverse sites and is thoroughly documented and evaluated to facilitate further replication. As three-year programs, the EBCE models focus on three phases: planning and implementation, expansion and outreach, and institutionalization. The elimination of sex-bias and sex-role stereotyping, and use of sex-fair counseling, placement, and follow-up are required components of all programs.

ACTIVITIES

The Project EXCEL instructional program for academic credit includes basic academic skills in English, Social Science, Math, and Science, job-related knowledge, and life skills. Students spend up to four days a week at a job site obtaining hands-on experiences in three different career fields each semester. Community Resource Persons provided over 240 student placements in the 1977-78 school year, in virtually all occupational clusters. Nontraditional placements are encouraged and an increase in students requesting nontraditional community placements has occurred. Girls have been placed in auto repair, police work, and construction; boys have worked as

kindergarten aides and with florists. Staff inservice workshops on sex inequity have been held and instructional materials are being reviewed to insure sex-fair information. A file is being compiled of nontraditional role models in the community. Students analyzed career materials for sex bias, displayed articles about nontraditional workers on bulletin boards, and role played activities emphasizing sex-fair guidelines.

EVALUATION AND DISSEMINATION

A third-party evaluator assesses the project at the end of each year. In addition, project staff evaluate their own activities to meet the sex-bias and stereotyping criteria established for vocational demonstration projects in recruiting and placing students, materials used, counseling, and staff development. Disseminating information about EXCEL's operation and results is an ongoing process and involves national EBCE network conferences, vocational educators meetings, on-site visits, and a regularly published newsletter. Although all model programs must address the issue of sex inequities, EXCEL's success is especially significant because the rural, Hispanic target population historically has shown a preference for traditional occupational choices.

FUNDING: Vocational Education Act, Part D

CONTACT PERSON AND ADDRESS

Zinta Sanders
Las Cruces Public Schools
301 W. Amador
Las Cruces, NM 88001